THE LIFE AND EDUCATIONAL CONTRIBUTIONS OF JOHN ANDREAS WIDTSOE

RAYMOND BRAMWELL PARKINSON

THE LIFE AND EDUCATIONAL CONTRIBUTIONS OF JOHN ANDREAS WIDTSOE

by

Raymond Bramwell Parkinson

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Raymond Bramwell Parkinson

has been approved by

[redacted]

Chairman, Supervisory Committee

[redacted]

Reader, Supervisory Committee

[redacted]

Reader, Supervisory Committee

[redacted]

Head, Major Department

[redacted]

Dean, Graduate School

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JOHN ANDREAS WIDTSOE

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CHAPTER I

INTRODUCTION

At the graveyard ceremony on the death of his father, young John A. Widtsoe in childish appreciation, pledged to continue his father's work. A successful school teacher by profession on the island of Froyen off the coast of Norway, John's father had served his generation well proving to be "gifted, capable, farseeing, and wise, and . . . much beloved among the people."[1] He had left a heritage with his son and family of love for good books, a craving for knowledge, and a desire to serve.

Positions of leadership and responsibility marked the rise of the Norwegian immigrant in his chosen field of education. From positions as a student, teacher, and director in agricultural experimental work; John A. Widtsoe was to become the president of two of Utah's institutions of higher learning, the Utah State Agricultural College and the University of Utah. Through his efforts many educational policies and procedures were improved, dry farming and irrigation practices were established, and many valuable publications in education and agriculture were printed.

The State of Utah benefited most directly and in

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[1] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 3.

greatest degree, but the training and experience of Dr. Widtsoe led to contributions of national and international significance.

In addition to his eminently successful endeavors in agriculture and education, his dedication to family, religious, and civic duties, probably best reveal the genuine integrity and worth of this man.

I. PURPOSE OF THE STUDY

The purpose of this study was to describe the life, philosophy, and educational contributions of Dr. John Andreas Widtsoe. In pursuit of this general objective, the following specific objectives have been considered. (1) to present a biographical sketch of Dr. Widtsoe's life and educational background giving special consideration of family, religious, and environmental influences which helped determine his goals, personality, and character; (2) to portray and describe his educational philosophy as revealed by his writings and published discourses; (3) to determine his important administrative contributions as President of the Utah State Agricultural College and the University of Utah; (4) to discuss his agricultural research studies and advancements placing special emphasis around contributions in the Utah area on reclamation, dry farming, irrigation, and chemistry; (5) to review his educational achievements, policies, and activities as a religious leader and Commissioner of Education of the Church of Jesus

Christ of Latter-day Saints; and (6) to summarize and evaluate the educational contributions of Dr. Widtsoe.

II. DELIMITATIONS

John A. Widtsoe was a man of unusual practical, academic, and executive ability. These qualities were clearly demonstrated through his contributions to agricultural development, his numerous published materials, and his able leadership at two universities as well as in other educational and civic organizations. The scope and versatility of Dr. Widtsoe's achievement made it necessary to limit this thesis to the presentation of material felt especially significant and pertinent for developing the theme of this study. Data relating to educational philosophy and contributions, professional and religious pursuits, dry farming and reclamation were of necessity included.

III. METHOD

The historical method was used in the preparation of this study. A variety of documentary materials served as the primary sources. Included were the autobiography and other books of Dr. Widtsoe, interviews with people associated professionally and personally with John A. Widtsoe; miscellaneous articles and publication in newspapers, periodicals, agricultural bulletins, Board of Education reports, University of

Utah and Utah State Agricultural College trustees' reports and minutes of Board of Regents' meetings; the Chronicle, University of Utah student newspaper; the Student Life, Utah State Agricultural College student newspaper; the Utonian and the Buzzer, yearbooks of the two schools; Church of Jesus Christ of Latter-day Saint Conference reports; Utah Education Association Review.

IV. RELATED STUDIES

The Life and Educational Contributions of Mosiah Hall by John G. Church, an unpublished Master's thesis, University of Utah, 1950; was studied for organization, style, and method. This biographical study dealt with the early life and educational accomplishments of a man whose greatest service to the state was rendered as a high school inspector interested in improving curriculum, personnel, buildings, and consolidation practices. His influential work in the final establishment of the State Director of Secondary Education was brought out in the study. In addition he was credited with support of raising teacher certification standards and influencing revision of curriculum. In the field of vocational rehabilitation he was particularly outstanding serving as supervisor of this work, thus enabling him to improve on many practices and procedures in the area.

The Life, Philosophy, and Educational Contributions of

Milton Bennion by Reed Holt Beckstead, unpublished Master's thesis, University of Utah, 1954, was also read for format and style. In this particular biography, mention was made of services rendered by Dean Bennion as teacher, principal, assistant professor, professor, teacher of philosophy and social education, dean of the summer schools and the school of education, and vice-president of the University of Utah. Special emphasis was placed on contributions to character education and philosophy of education. Civic and religious accomplishments in addition to biographical and teaching contributions were, also, carefully outlined and evaluated.

The Educational Activities of Dr. James T. Worlton: A Chronology by Max Goodey Holt, unpublished Master's thesis, University of Utah, 1954, provided additional information concerning thesis writing. Dr. Worlton contributed much to the state as teacher, principal and superintendent. Under his direction the health and lunch program was initiated at Edison School; the "Sigma Index Score" was adopted by the Salt Lake City Schools; a course of study and salary schedule became effective at Granite; a testing program was developed for the Salt Lake City Schools; a coordinating unit organization was used in the elementary; and pupil classification for instructional purposes was achieved. Dr. Worlton, also, published several useful textbooks; two of these being,

Community Life in Salt Lake City and Utah and Community Life in Utah and provided leadership in the formulation of many courses of study for the Salt Lake City schools.

V. JUSTIFICATION

It was hoped to collect and organize in this volume important information relating to the educational accomplishments and philosophy of Dr. Widtsoe to serve as a source of instruction, inspiration, and guidance in the undertaking and solution of future issues and problems in the field of education.

VI. ORGANIZATION

The study was organized in the following way:

Chapter II. "Biographical Sketch" reviewed the family life, educational background and training, and other significant facts which shed additional light and gave insight as to his attitudes, character, ideals, and aspirations.

Chapter III. "Educational Philosophy" described significant views and convictions as indicated in his writings and as remembered by intimate co-workers and friends.

Chapter IV. "University President" presented his important administrative contributions as President of the Utah State Agricultural College and the University of Utah.

Chapter V. "An Agricultural Leader" discussed his

achievements in the areas of dry farming, irrigation, land management, and federal reclamation. This study primarily discussed contributions made in the State of Utah, but, also, dealt with significant activities outside the state.

Chapter VI. "A Religious Leader" reviewed his educational achievements in this field stressing the work accomplished in the development of the Church Seminary system and Institutes as Commissioner of Education.

Chapter VII. "A Summary" presented an evaluation of the educational contributions of Dr. Widtsoe.

CHAPTER II

BIOGRAPHICAL SKETCH

John A. Widtsoe was born in the tiny hamlet of Daloe, Norway, on January 31, 1872. In this area on the island of Froyen, his father, a school teacher by profession went about his work of instruction among the villages of Titran, Hovik, and Dloe. Soon after John's sixth birthday, his father died leaving a widow and two sons, John and a younger brother, Osborne, then two months of age.

The following six years were spent in Trondheim, capital of Norway, where a number of relatives lived. In his autobiography Dr. Widtsoe wrote vividly of these early years.

> They were happy childhood years. In the summer there were walks into the country, usually berrying, and, of course, swimming the waters of Trondheim's Fjord. That I came near drowning several times was really of little consequence to me; but I disliked the aftermath of my mother's stern discipline. In the Winter, the snow lay high, and ice covered the Fjord. The short days, then, were not long enough for the fierce joys of skiing and skating in the lovely northern winter weather.[1]

Some three years after the death of his father, Latter-day Saint missionaries entered the home of the Widtsoes and convinced them of the truthfulness of "Mormonism." In the fall of 1883 the family of three set sail from Oslo over the North Sea to England, another eleven day voyage over the

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[1] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 3.

Atlantic Ocean to New York, and from there a ten-day journey by railroad to Logan, Utah, where the widow and her two sons arrived on November 17, 1883.[2]

John's mother, Anna Karine Gaarden Widtsoe, was a woman of unusual foresight and strength of character. These pioneer qualities had enabled her to meet the problems of widowhood and motherhood without fear or hesitation. Now practically penniless in a strange land and among new people speaking a foreign tongue, she accepted the challenge of the circumstance. Sewing until late at night and with the help of the earnings of her sons, Anna Widtsoe established a happy and successful home in Utah. Many lasting friendships were made, civic and religious responsibility was accepted as an opportunity as well as a duty, and John A. Widtsoe grew and developed, learning the pioneer virtues of courage, faith, frugality, and industry.

I. EARLY SCHOOLING

At the death of his father, young John had, in sincere childish appreciation, pledged to continue in the footsteps of his father. It was understood by the family that he and his brother Osborne were to seek an education and become school teachers. From early childhood a good foundation had

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[2] Ibid., p. 8.

been laid for future training. A love for good books, an insatiable thirst for knowledge, the guidance and encouragement of understanding parents provided the necessary stimulation and desire for educational achievement.

In Logan there was but one bookstore which was operated by James T. Hammond. The few dollars that John was able to save were invested in a small library of books from that store. On one occasion he bought a set of Chamber's Encyclopedia, at relatively great financial sacrifice. Commenting on the venture in later years he said, "It was a tremendous financial venture. But, who should care, when the books contained the world's knowledge for which I was hungering?"[3] Having been taught by his mother to read at five years of age, John early in life made good use of his father's well-stocked library venturing into the fields of folk lore, fairy tales, and ancient sagas. At eight years of age he waded through The Merchant of Venice recalling vividly his contempt for Shylock.

The early formal training of John A. Widtsoe was sporadic and intermittent. Soon after his arrival from Norway, he was placed in the second grade because of his difficulty with the English language. Within a week, however, he was advanced to the seventh grade because of his earlier preparation in Norway under private tutors. Daily employment due to

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[3] Ibid., p. 18.

financial need soon made formal education impossible. To satisfy his craving and prepare himself for higher education, John sought private instruction after working hours. These classes were supplemented by studies done on his own initiative in such areas as algebra and higher mathematics. In this manner he was able to prepare himself for later opportunities.

When John was seventeen years of age the family, which now had their own home built and paid for with a garden area supplying much of the food, decided to pay the price of education.

> In the fall of 1889, I registered in the Brigham Young College, of Logan. Theology, rhetoric, German, Latin, physics, chemistry, geology, bookkeeping, algebra, geometry, and the theory and practice of teaching flew their banners, and I followed them avidly.[4]

Much satisfaction and joy came to him during the stay at the Brigham Young College. Much of this was due to the excellence of the teachers. Dr. Joseph M. Tanner was then serving as President with William H. Smart, Douglas M. Todd, W. H. Apperly, F. K. Nebeker, and others on the faculty. The training was simple. Library and laboratory facilities were meagre and inadequate. But the instruction was of that kind which prepared men well. Working late into the night on many occasions, young Widtsoe drank deeply of the fountain of

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[4] Ibid., p. 21.

learning. As a result of his labors and ability, opportunities at times presented themselves. "When in my second year, I was trusted to teach the beginning class in algebra, I felt that I was on my way to my destiny."[5]

Like the youth of all ages the activities were not always of a serious nature. Vigorous pursuits outside the classroom were enjoyed and participated in with relish. The mischievous antics of youth invaded campus life from time to time as well. One incident deserves mention. Many interesting experiments then as now were performed in the chemistry laboratory. A certain compound, nitrogen iodide, had rather potential qualities. In a wet condition it was inert, but dry it exploded violently upon contact. One deliberate, slow teacher learned to his dismay about the characteristics of the compound. Returning from the basement where the faculty was accustomed to eat lunch, he reached the first step upward only to be greeted with a fierce noise which was followed by a succession of thunderlike explosions as he bounded up the stairway. To a group of eager, prankish chemistry students, this little experiment had satisfied their curiosity about the mobility of the teacher and the potentiality of the chemical.

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[5] Ibid., p. 22.

II. ADVANCED STUDIES

Among the many who molded and influenced the character of John A. Widtsoe at the Brigham Young College, the name of Joseph M. Tanner emerged as one of the greater lights. As president and teacher at the college, he influenced in both an administrative and instructional capacity. Dr. Widtsoe described him as being "not only a great teacher; he was also an inspirer of men. . . . Facts are forgotten; but the memory of guidance and inspiration never dies. Inspirers of men are the world's great need."[6]

In June of 1891 following the graduation, Dr. Tanner asked Widtsoe to be one of seven picked young men to accompany him in pursuit of higher learning. With such a vital decision to be made, the Widtsoes again went into council and emerged with a determination by means of further sacrifice to send John on for more training, a wise investment in the future.

Accompanied by such men as Joseph Jenson of St. Charles; Moses C. Davis of Malad, Idaho; George L. Swendsen of Richmond; George Thomas of Benson; George F. Thatcher and Arthur F. S. Thomas of Salt Lake City, John A. Widtsoe journeyed to Cambridge and Harvard University. It was a new

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[6] Ibid., p. 26.

and thrilling experience in many ways for the young man of nineteen years. New geographical, historical, and personality horizons were beginning to appear. At the same time a realistic comprehension of the economic demands of such a venture were not forgotten. Fifteen hundred dollars lay in the bank to his credit, but only after a home had been mortgaged, and five friends: John E. Carlisle, B. F. Riter, H. H. Thain, Isaac Smith and A. S. Skanchy had shown confidence and signed notes.

The first summer at Harvard was spent in preparation for the entrance examinations held that fall. Self-study and a summer school course were taken to better meet this challenge, the failure of which would have meant a year lost to preparatory school. The subsequent successful passing of the tests was an even greater achievement than for most students considering his Norwegian background.

The next step was the selection of a major field of study. After much deliberation and thought, John cast his lot with chemistry partly because of interest and partly because of its practical use in both the fields of teaching and mining. "There were several strings to the chemical bow."[7]

During the next years chemistry and research became his "college passions." During his senior year he was elected

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[7] Ibid., p. 31.

president of the Boylston Chemical Club, and in June 1894, John Widtsoe graduated from Harvard University with highest honors. Many acquaintances and lifelong friends were made during the stay in Cambridge. In the department of chemistry there were such outstanding men as Theodore W. Richards, a later Nobel prize winner, Henry B. Hill and Charles L. Jackson, and Josiah Parsons Cooke heralded as the foremost man in his field in America. The little Mormon colony in Massachusetts was a regular stopping place for people traveling in the east. George Q. Cannon, member of the Presidency of the Latter-day Saint Church, Moses Thatcher of the Council of Twelve Apostles; R. K. Thomas, a merchant from Salt Lake City were just a few of those who stopped and became fast friends of the Harvard group.

Following graduation, he was accepted immediately into the faculty of the Utah State Agricultural College as professor of chemistry and chemist to the Experiment Station. Apparently from the first, teaching was enjoyed and much to his liking. "I made some mistakes in those early days, but fortunately they spurred me on to greater efforts to become a really good teacher."[8] The experimental work with the agricultural station proved especially fascinating. Breaking precedent Dr. Widtsoe traveled to all parts of the State of Utah taking

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[8] Ibid., p. 46.

samples of the soil which later led to the formulation of suitable crop programs. Many valuable bulletins and reports were published and of special significance was the organization of the Farmer Institutes to present the knowledge acquired directly to those concerned.

The four years at the Utah State Agricultural College were profitable ones and greatly influenced the decision to do further study and investigation into physiological chemistry or what is known today as biochemistry. Harvard University had granted to John A. Widtsoe one of the four Parker fellowships with a generous stipend. So, with his bride of a few weeks, Leah Eudora Dunford, and her sister, Emma Lucy Gates; a determined young man set sail for Europe. Leaving Salt Lake City on August 6, 1898, the group reached Goettingen, Germany, early the following month making the journey in a seaworn vessel called the Wassland.

The University of Goettingen, Germany, was to be the place of study for the next while. This choice was made primarily because Bernhard Tollens, the most famous scientist in the carbohydrate field, was Director of the Agricultural-Chemical Laboratory at the University. Doctor Tollens was a curious man, full bearded with a skull cap covering his bald head. In German, French, or English he conversed with ease. Regardless of his idiosyncracies, he knew his chemistry and filled the laboratory with the spirit of discovery. Absorbed in research

John passed the time rapidly and on November 20, 1899, the doctor's examination was taken under the close scrutination of some sixteen or eighteen professors sitting around a long table. With the degree of doctor of philosophy and master of arts, Dr. Widtsoe had reached another milestone.

The next few months were spent in traveling and studying in Europe--a short while in Berlin with Emil Fischer who was working on the chemical constitution of the sugars; off to Zurich, Switzerland and Professor Doctor E. Schulze, the protein specialist; in London for the spring and summer of 1899 where educational opportunities abounded. It was a beneficial and profitable interim.

III. DIRECTOR OF THE EXPERIMENT STATION

While in London Dr. Widtsoe had received notice of his election as president of the Utah State Agricultural College. While considering the matter, a cablegram was received from a close friend who advised not to accept the offer. The advice was followed. Shortly before sailing the word was received that W. J. Kerr, formerly president of the Brigham Young College, had been chosen president of the school and that Dr. Widtsoe had been named Director of the Agricultural Experiment Station.

In September of 1900 he assumed the directorship of the Experimental Station. A fertile field of research and

study had been opened to the young chemist. While experiment stations had been established in every state of the union, Utah presented a very peculiar problem all its own. With so much of the area of the state made up of mountains and valleys and with so little rainfall to meet the demand of crops, the full utilization of land and water resources was an ever present enigma. In pursuit of the solution to this problem, the departments of irrigation engineering, agronomy, and chemistry joined forces. The investigations that followed resulted in the collection of much data concerning relationships between soil, water, and crop yields; chemical compositions of soil under given conditions, etc. Out of the studies two major conclusions were reached: "First, that irrigation offers a control of crop quantity and quality, not known to humid agriculture." And second, "that by intelligent, economical use of the water already available, the irrigated area may be greatly expanded."[9]

IV. PRESIDENT OF TWO INSTITUTIONS

From 1907 to 1921 John A. Widtsoe served education well as the president of two institutions of higher learning, the Utah State Agricultural College from 1907-1916 and the University of Utah from 1916-1921. From 1905 to 1907 he served as

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[9] Ibid., p. 75.

head of the Department of Agriculture at the Brigham Young University. This sixteen year period was characterized by war, political upheaval, and general unrest. Dr. Widtsoe had received the news of his selection at the Utah State Agriculture College with rather serious misgivings. The appropriations of the school were low; the faculty had been divided on the question of "Mormon" influence at the university; the resignation of the former President W. J. Kerr had been regarded by some as an irreparable loss. Notwithstanding these circumstances, Widtsoe accepted "with the resolve to serve the State to the best of my ability, and remain true to my friends."[10] A complete resume of the administration of Dr. Widtsoe at Utah State will be covered in detail in a subsequent chapter.

Upon the retirement of President Kingsbury of the University of Utah General Richard W. Young called John A. Widtsoe and asked him to come to Salt Lake City. There they met with the Board of Regents of the University of Utah. Again the Harvard graduate was offered the office of president of one of Utah's institutions. The prospect at the University of Utah were even less inviting than were those at the Utah State Agricultural College, but after careful consideration and thought, and upon the insistence of close friends and his

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[10] Ibid., p. 99.

wife, the position was accepted. Again the final decision was based greatly on the fact that there was an important task to be undertaken, and trust and confidence had been placed in him to accomplish it well. How could he refuse? On January 20, 1916, he was formally elected president of the University of Utah, beginning the term of office on July 1, 1916.

The ensuing five years were some of the most trying and demanding of his career. The outbreak of World War I had complicated the picture and added to the problems at hand. Much work at home, numerous meetings in the east and west in connection with university matters, local demands for advising and speaking filled every hour of the days. Church work, too, was an important part of his activities as it had always been. Membership on the General Board of the Y.M.M.I.A., the direction of the youth of the Church claimed his earnest attention. "The U. of U. days were filled excessively with labors. . . . but they were worth-while accomplishment."[11]

V. A CHURCH LEADER

Since his conversion to the Church of Jesus Christ of Latter-day Saints in faraway Norway, John A. Widtsoe had been faithful and diligent to his convictions. Throughout his life in Logan, training in the east, and later contributions to the

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[11] Ibid., p. 141.

state educational system, he had assumed responsibility and callings which had come his way. During the first years after graduation from Harvard, he became the first assistant superintendent of Mutual in one of the wards. About the same time a study group had been organized in order to understand the many implications for truth and advancement associated with the Church doctrine. Parley P. Pratt's A Key to Theology was chosen as the text of study which launched the group into some very interesting and thought provoking discussions. One afternoon Stake President Orson Smith called to see John Widtsoe and asked him to put his talents and training to a broader use. The First Quorum of Elders of Cache Stake was in the process of being reorganized and was in need of a counselor and quorum teacher. Gladly the position was accepted as an opportunity to serve and progress. In his writings, Dr. Widtsoe noted with pride that the quorum grew and with the help of a Doctrine and Covenants commentary which he compiled the effectiveness of the class instruction improved.

In 1905 he was called to serve as a member of the General Board of the Young Men's Mutual Improvement Association. Just prior to this calling he had been president of a ward young men's group and member of the stake Sunday School Board, duties which he performed faithfully. His ability in writing and organizing material had been used on a number of occasions. The Sunday School outline for the study of the Doctrine and

Covenants, a study outline of the Old Testament, a series of articles on Mormon philosophy which became the book entitled Joseph Smith As Scientist, the before mentioned Doctrine and Covenants Commentary, and a number of other writings were published and used in class and study groups.

On March 17, 1921 at the end of Dr. Widtsoe's fifth year as President of the University of Utah, Dr. Richard R. Lyman asked President Widtsoe to come to his office immediately. Ushered into the Salt Lake Temple where the Council of Twelve Apostles was having its regular Thursday leadership meeting, he was informed that he had been called to fill the vacancy in the Council, caused by the death of Anthon H. Lund. While many lifelong ambitions and plans flashed through his mind at that moment, he accepted the call, a sincere demonstration of the love and earnest conviction for the Church embraced in Norway. At a General Church Conference on April 3, 1921, John A. Widtsoe was sustained as a member of the Council of Twelve Apostles. In June of the same year the keys of the presidency of the University of Utah were turned over to Dr. George Thomas, a worthy and able administrator.

The acceptance of the Apostleship meant many changes in the lives of the Widtsoes. Up until that time financial independence had been approaching the realm of possibility. The Church allowance, however, was about a third of the annual earnings of the previous twenty years. The car was sold and

the hired help was discharged. "For the apostleship I turned my face from the pursuit of money."[12]

Many and trying were the assignments of the members of the Twelve. The days and weeks were filled with activities. Church-wide assignments and regular stake visits crowded their lives, but in addition both permanent and temporary committee posts and numerous meetings had essential places on the agenda. Usually during the course of a year a visit was made from three weeks to a month to a mission. In addition correspondence and interviews drained on time and energies.

In connection with his duties on the Council of Twelve, one position deserved special consideration because of its implications for education. Having spent most of his life in developing and advancing the cause of the school system, Dr. Widtsoe was a natural choice for Commissioner of Education of the Church. The usefulness of the Church high school was coming to an end and in its place was appearing the seminary system as a means of church education in the schools. In the capacity of Commissioner he served a year; later in March of 1934 he was again appointed. Dr. West who had been serving as assistant commissioner succeeded to the position upon the call of Dr. Widtsoe to initiate a class in Mormon doctrine at the University of Southern California.

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[12] Ibid., p. 162.

In addition to these assignments, John A. Widtsoe worked with the editorial staff of the Improvement Era, the principal Church magazine. A series of articles written in answer to questions submitted were prepared and published in the Era, and were later bound into a book, Evidences and Reconciliations. In the summer of 1923 he was selected to accompany Senator Reed Smoot to Europe in connection with congressional business. As an incidental result of the trip many European countries were visited and much of the animosity and ill feelings harbored against the Church were dispelled. A few years later Dr. Widtsoe and his family were to return to Europe to preside over the British Mission.

VI. MISCELLANEOUS PURSUITS

The variety of activities and pursuits of John A. Widtsoe were truly amazing. After receiving the highest degree conferred in his field, he rose to the presidency of two institutions of higher learning. He further advanced the cause of education in the state and nation during his administration as President of the Utah Education Association. In this capacity he served an unprecedented two terms due to the unsettled war conditions. In the areas of agriculture, reclamation, and dry farming the contributions alone would have made him famous. This close association to western agricultural problems brought numerous opportunities to work on

important commissions. In 1921 he was placed on the State Water Storage Board on which he labored until it was dissolved in 1941. In 1947 he became a member of the Utah Water and Power Board. In 1922 a special group of seven men chosen throughout the nation gathered to resolve a problem of the Reclamation Bureau. Dr. Widtsoe served as vice-chairman and secretary of the committee. In gratitude for his services, the Secretary of the Interior, Hubert Work, wrote the following message to President Heber J. Grant:

> Please allow me to express my thanks to you for making it possible for the Government to have the services of Doctor Widtsoe in reorganizing the Reclamation Service in this Department.
>
> No one within my knowledge could have brought to this tremendous task the knowledge and industry, with the unusual ability to express their results, that he did.
>
> With his associates, I believe he has accomplished a piece of constructive work that will save Federal Reclamation.[13]

VII. A WIFE AND FAMILY

While John A. Widtsoe was attending Harvard at Cambridge, Massachusetts, five young ladies from Salt Lake City came to the university to attend the summer school. Among the group was Leah Dunford who during her stay became the friend and close companion of John. Long walks, quiet

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[13] Letter from Hubert Work (former Secretary of the Interior) to President Heber J. Grant, 1924.

conversations, pleasant days were passed in the presence of this young lady. Thoughts of the long period of study and preparation ahead had dulled the mind of the young student to any prospects of marriage, but the summer hadn't passed before John was thoroughly in love. In describing Leah in his diary, he made the following comments:

> She has an excellent complexion, a fair skin, light golden hair, very plentiful and pretty, an excellent figure, seldom seen as perfect. She is large, about 145 lbs. She has a good intelligence, more cultivated than most young ladies of her age and station in life. She sings beautifully. 'Old Madrid' is my favorite, which may be replaced by 'The Waif'. I heard it for the first time this evening. She plays string instruments well, as also the piano. . . . What she says in a sober mood, generally, not always, has a point to it. In lighter vein she is often brilliant. . . . It is hard to go around her acute intellect. Her native intelligence, and native wit more than measure up with the wisdom gained from my alma mater.

After her departure letters followed and then marriage on June 1, 1898 in the Salt Lake Temple. Both were desirous of a large family, but of the seven children born only three reached maturity, Anna Gaarden, Karl Marsel and Leah Eudora. Marsel, the only boy, proved to be a capable student and successful missionary, and was launching his teaching career in the seminary system in Preston, Idaho, when he was suddenly taken ill with pneumonia and died, shortly before his twenty-fifty birthday.

The two remaining girls became especially important during the ensuing years. After graduating from college and serving in the Southern States Mission, Anna married Lewis J.

Wallace presenting her parents with three grandchildren, John, Joanne, and Margaret. Eudora, also, graduated receiving her degree from the University of Utah. In addition she traveled with her parents in Europe where she attended the Universities of Liverpool, Paris, and London. After teaching school for a year she married O. Homer Durham (now serving as Vice-president of the University of Utah).[14]

Dr. Widtsoe spoke of his marriage and family as the high light of his life and attributed much of his success to the help, encouragement, and devotion of his wife. Their love grew through the years and its true significance was suggested when he said, ". . . Wherever Leah is, there is Eden. This is the best chapter in the story of my life."[15]

VIII. THE PASSING OF A LEADER

On November 28, 1953 Dr. John Andreas Widtsoe passed away at his home. The funeral services were held in the Salt Lake Tabernacle Tuesday, December 2. His death marked the passing of one of the great lights in the field of education, science, and literature. His contributions were truly meritorious, and their far reaching effects have molded many of the ideals and goals of young and old everywhere. Few men

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[14] From a personal interview with Anna Widtsoe Wallace, June 14, 1955.

[15] Widtsoe, In A Sunlit Land, op. cit., p. 239.

were endowed with such remarkable courage, foresight, and ability as this Norwegian immigrant.

Doctor A. Ray Olpin, President of the University of Utah, in a personal letter to the family made the following tribute:

> The passing of few men has left or could leave a greater void than the one resulting in the death of President-Emeritus John A. Widtsoe. The kindness, love, wisdom, sympathetic understanding, practical counsel, and devotion of this great man will be sorely missed by all of us at home and abroad, for we are mourning one who was known, understood, and appreciated the world over. He was a true internationalist, for his efforts were aimed at helping all mankind by sharing with them his spiritual richness and practical knowledge. It will no longer be possible for us who were close to him to be warmed by his handclasp, to be stimulated by the twinkle in his eye, and to be uplifted and encouraged by his kindly advice. But we all continue to receive inspiration from his memory, from his voluminous writings, and from his wife and family, who carry on his ideals.
>
> Especially do we at the University of Utah mourn the loss of our former president. His interest in the teaching of young men and women never diminished. He bequeathed to us his great library on western history and culture. He built his home on the edge of the campus, where he was almost surrounded by students. He was where he could observe affairs at the University at close hand. Yet he always seemed to withhold comment on things that may have displeased him and commended our every effort to maintain high standards of education.
>
> I personally sense a tremendous loss in Doctor Widtsoe's passing. The administration, faculty and students join me, I am sure, in extending our sympathy and love to his bereaved family. We are happy that most of them are affiliated with the University in one way or another. We shall look to them for reflected inspiration from our departed president and friend.

The Utah State Agricultural College, also, forwarded a tribute which read as follows:

Dr. Widtsoe was a pioneer of new frontiers on a national scale while he was president of U S A C. Alert to the needs of the state, he made channels for carrying the learning of the college and the experiment station to the people everywhere in Utah. Because of his forward-looking leadership in extension education, Utah is credited by authorities as having had the first county agricultural agent and the first home demonstration agent in the nation. These teachers were sent out during the administration of President Widtsoe.

President Widtsoe, aided by Mrs. Widtsoe, took a leading part in initiating a nationwide movement for the scientific improvement of the home. Building on developments in home economics already begun at the college, they assisted in drafting a bill which Senator Reed Smoot introduced in the United States Senate. This proposed legislation later emerged as the historic Parnell Act.

Through his scientific books and papers, through his leadership in scientific organizations, and through the preparation of students in science for service abroad, Dr. Widtsoe was one of the pioneers in the movement to give America's scientific and technical strength to backward foreign lands.

We of the Utah State Agricultural College are deeply grateful for the many contributions which this great and good man has given to our institution, to other educational institutions and to mankind in general. Through his wise and sympathetic teaching, his skill in writing, his power as an administrator, and his inspirational leadership of men and women young and old, he has exerted a many-sided influence which will never die.

The tribute was signed by Dean Carlton Culmsee; LeRoy Blaser, executive secretary of the Alumni Association; Deon Hubbard, president Associated Students; Thorpe B. Isaacson, chairman of the Board of Trustees; and Louis L. Madsen, president of the college.

And still another tribute came from an institution in Utah where Dr. Widtsoe served. From the Brigham Young

University the following message was received from Dr. Wilkinson.

> It is with mingled emotions that we write this note of gratitude and sorrow. We do it not only on behalf of the students, alumni and faculty of Brigham Young University, but on behalf of the university itself--a university whose soul has been enriched by the inspiration and loyalty of you and your devoted husband since your wedding reception, before the turn of the century, in old College Hall.
>
> Our dominant emotion, however, is that of gratitude for the dedicated and useful life of your distinguished husband, and for his contribution to the Brigham Young University. Serving as head of our department of agriculture from 1905 to 1907, from which he was called to be president of the Utah State Agricultural College, he gave an impetus to that work which has culminated 124 of our graduates in agriculture now being on the faculties of 28 agricultural colleges, and universities and extension divisions throughout the country. . . . Never narrow or partisan, but always a seeker of light and truth and service, he continued, during our days of adversity at the Brigham Young University, and while he was successively president of the Utah State Agricultural College and the University of Utah, to befriend this institution. . . .
>
> Like Karl G. Maesser, Dr. Widtsoe was one of the great educational leaders of our time. But his influence was even wider, and his imprint will never be erased from the campus of any of the three great institutions of learning in this state, all of which he served so well.
>
> We extend to you our sympathy and love, and our gratitude for the life of both you and Brother Widtsoe.

CHAPTER III

EDUCATIONAL PHILOSOPHY

Mention has been made of the great love, and even insatiable thirst that Dr. Widtsoe had for learning and education. Wide experience, travel, close association with leading educators in the United States and Europe, constant reading, discoursing, and writing all were essential elements in the development of the philosophy of life and education which Dr. Widtsoe embraced. To him education was more than just an accumulation of facts skills. It was more than just a training and preparation for the future. The very foundation and bulwark of national progress and the guarantee of personal freedoms were contingent upon an adequate and successfully operating educational system.

> We certainly believe that a 'republic's main business is education.' Compulsory common school education has conquered the land; free high schools are in every village; state and private colleges and universities crowd the cities. So easy is it to get an education that the young man without it is in disgrace. Whether we who are older possess an education or not, we mean to let our children taste its joys. Somehow, dimly, but with certainty, we know that the destiny of the nation is inevitably bound up with educational progress. The masses of us, struggling for better conditions are convinced, though the reasons cannot be formulated into speech, that the equal rights of which we have the promise can be attained only through equal education. A passion for education has seized us and it will not die. It will be led and directed, and become the safest guarantee of the

permanency of the institutions of this free land.[1]

During the fifteen years that Dr. Widtsoe served Utah as head of two of the state's higher institutions, an educational horizon of many opportunities was beginning to appear. Prior to that time only a select few had been privileged to enjoy an education of any degree or duration. However, even as an enthusiastic proponent of education, he did not minimize the fact that formal training and education were not always necessary for a liberal education.

> Of course it is not absolutely necessary for a person to go to school to acquire an education. Our fathers and mothers, who were in this state before education became possible for all, are in most cases truly educated. However, their education has come to them against great odds. Experience is a hard and expensive teacher. Schools and school training make the acquirement of an education easy and rapid, and enable those who use their opportunities properly, to enter early and effectively upon life's work.[2]

Certainly the wisdom and truth of the above statement has been born out in many instances. Alert minds and searchers for truth will be found among the untrained as well as the formally educated. However, to discount the value of the day-by-day learning process in a well directed learning situation would be unjustified.

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[1] John A. Widtsoe, Education for Necessary Pursuits, College Bulletins Vol. 12, No. 5, January, 1913. p. 26.

[2] John A. Widtsoe, Evidences and Reconciliations (Salt Lake City: Sun Lith. Company, 1943), p. 5.

I. SEARCH FOR TRUTH

Possibly the outstanding theme and the heart of Dr. Widtsoe's philosophy was the search for truth. In defining the word, he simply observed, "Truth is knowledge gathered and used for human welfare."[3] In commenting on it, he stated:

> Truth must be held in undeviating respect and it must be obeyed. Unsupported tradition must be forgotten. Mere nostalgia has no place in progress. Every chain of error, binding us to the past, must be broken. Indefensible practices, however, appealing to the senses, must be laid aside. Every proposal must be tested for its conformity with truth. . . .
>
> You young men and women have been searchers after truth. If during these years of study you have not learned to love truth above all else, if you shall prostitute truth to evil ends as has been done in this war and elsewhere, your college course has been a failure. . . .
>
> A civilized man is one who knows truth and applies it for the good of man. He uses dynamite to build a temple, not to destroy it.[4]
>
> Knowledge of truth is precious. It extends man's vision, gives him powers, and makes possible his continuous growth. The search for knowledge should never cease, on earth or in the hereafter.
>
> The boundaries of truth are limitless. Man's accumulated learning is already so vast that no person, with present powers, can know it all. At best, a man may know well a small part of it, and have a dim general view of the remainder. The choosing of the knowledge to be learned becomes therefore a most serious matter.[5]

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3 Widtsoe, Education for Necessary Pursuits, op. cit., p. 15.

4 From Baccalaureat Address given at the Utah State Agricultural College, June 5, 1938.

5 John A. Widtsoe, "Worthwhile Knowledge," The Improvement Era, 40:368, July, 1937.

The search for truth was doubly important in the philosophy of John A. Widtsoe. While he extolled the eternal verities as an aim of education; he, also, firmly believed that knowledge and learning should be functional.[6]

> . . . the right of way . . . must be given to useful knowledge--knowledge that may be used in making a living, in meeting the actual and daily needs of life. Unless this is done our physical defenses will prove inadequate, and economic chaos will increase. We must dignify and ennoble the necessary tasks of life, to secure contentment among humanity.
>
> The activities of life center upon the business of making a living. Every man worthy of life desires to be able to sustain himself and a family of his own.
>
> Practical education must be featured as never before. Men and women must be taught how to use the natural resources about them for their support in life. The economic possibilities must be set forth, of waters, soils, forests, mountains, and hills. To solve the problems of the day, and of tomorrow, we need more trained farmers and mechanics, skilled craftsmen, business men and housewives who are so educated that they can do their work intelligently, and therefore with respect for their calling; and who are ready to wrestle joyfully with the gifts of earth.
>
> Such education does not require special industrial or vocational schools. This would defeat the spirit of democracy, for every boy, rich or poor, should learn how to support a family, and every normal girl looks forward to the joys of wifehood and motherhood. Besides in a true democracy, class consciousness must be avoided. Such important training should not be neglected nor left to chance. Our present system of education should direct from year to year, from grade to grade, the thought and training of students toward the application of knowledge to useful ends--life-sustaining ends.[7]

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[6] Interview with Dr. G. Homer Durham, March 12, 1955.

[7] L.D.S. Conference Report, October, 1940, p. 64.

> Knowledge, which of itself is dry and well-nigh worthless, blossoms into life only when used. Education, derived from sound knowledge, means that a person has so developed his inborn powers that he can and does use his acquired knowledge for human welfare. Man is always of first concern. The application of knowledge to the development and needs of the student should therefore be the objective of all good learning and teaching. The man with little knowledge, used well in the affairs of men, is better educated than his brother of much knowledge, used poorly or not at all. All seekers after learning should carry their knowledge into the province of application.[8]

Dr. Widtsoe classifies worthwhile knowledge into two forms.

> First, factual knowledge, gained by the accurate use of the senses. The daily motion of the sun east to west is such a fact of observation. The other is inferred knowledge, that is the attempted explanations of observed facts. The wave theory of light is such a scientific inference. Factual knowledge is certain, unchanging, within the sense powers of man. Inferred knowledge is of varying degrees of credibility, uncertain, changing with the appearance of new facts. Both kinds of knowledge are useful, but the truly educated man does not confuse facts and inferences.[9]

Worthwhile knowledge should first of all begin at home and then spread to more distant fields. "It is more important to know the geography of the home than of China; to understand our neighbor than the Hottentot.[10] To Dr. Widtsoe a woman with a college degree who cannot care for a home, child and husband has not been educated adequately or properly.[11]

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[8] John A. Widtsoe, "Seek Learning," The Improvement Era, 39:552, September, 1936.

[9] Ibid.

[10] Widtsoe, "Worthwhile Knowledge," loc. cit.

[11] Ibid.

> Worthwhile knowledge must be usable and must be used. Knowledge itself is dry as dust. It springs into life when made to serve human needs. Fortunately, all knowledge may now or later be used for man's good; but unfortunately, many persons learn facts without their present, possible application. Facts and their uses should be taught together. Only such 'practical' education has real human value.[12]

II. DUTY OF SCHOOLS

> We have given our public schools a great trust; and have endowed them with tremendous power. Our children are in their keeping during most of the formative years of life. As the schools teach so will the coming generation think and act. The conditions in our land today, good or bad, may well be laid at the doors of our schools, which nourished us in our immaturity with ideals which in our maturity are being translated into action.
>
> In return for this trust we expect our schools to be preservers of the principles of human welfare; bulwarks against every insidious, subversive foe of human freedom; defenses against all invaders of human rights, teachers of the way from war to peace, from poverty to prosperity.[13]

The schools represented a beacon of hope for the fulfillment of ideals and goals. A powerful defense during social or economic stress and moral decline, the school program was relied upon to influence and mold the character of its charges to meet the challenge of trying times. Daily changes, struggling millions living under inadequate conditions provided, according to President Widtsoe's way of thinking, a great responsibility for the schools.

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[12] Ibid.

[13] Widtsoe, Baccalaureate Sermon, loc. cit.

To meet this high commission two major objectives must be accomplished.

> First, moral and religious education must be given hereafter an honorable and corresponding place by the side of the traditionally important subjects of the curriculum. For the safety of the nation, moral teaching should be given, at definite hours, in every publicly supported classroom. . . . There must be no whining and hiding behind a misinterpretation of the constitutional provision for religious liberty. We still say on our coins, 'In God We Trust'. There must be no attempt to place the sole responsibility upon the Church.
>
> Second, the right of way, after moral and religious training, in every school and college curriculum, must be given to useful knowledge--knowledge that may be used in making a living, in meeting the actual and daily needs of life.[14]

III. EDUCATIONAL DEFICIENCIES

In pursuit of educational goals, Dr. Widtsoe was not hesitant in pointing out structural weaknesses which were impeding progress and teaching effectiveness. Among the more basic inadequacies was the wide demarkation between the educational levels.

> The demarkation between high school and elementary school should be slight. Failure to observe this has often worked injury. The university has set up entrance requirements without thought of the lower schools. . . . College faculties are inclined to dictate in the matter of entrance requirements to the high schools, and they in turn to the elementary schools. The reverse procedure would be better, though frequent consultation with one another would be best.[15]

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[14] Ibid.

[15] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 149.

The fetters of tradition were still binding on many of the schools' curriculum. Dr. Widtsoe ever consistent with his educational philosophy of a practical education was in complete accord with the removal of Greek and Latin from the list of requirements for college entrance.[16] He minimized the value of algebra as the gateway to "educational Heaven" placing greater emphasis upon good teaching of well organized subjects than upon the subjects themselves.[17] Evidence of faulty training was reflected in the products of many of the schools of the nation.

> The objective of education is to provide means for man's successful living and happiness. Nevertheless, I have met numerous high school and college graduates who escaped entirely a reasonable knowledge of the human body, its organs and their functions. It is pitiful that an educated person scarcely knows he has kidneys or a pancreas until they become diseased; of how he should feed his body for full health; or the best methods of keeping well. It becomes pathetic when the young college graduate enters upon marriage . . . but barren of knowledge pertaining to home life.[18]

IV. THE EDUCATED MAN

The success and value of an education could be determined by many criteria, two of which, according to the philosophy of Dr. Widtsoe, were of special significance.

The education of a person can best be measured, first,

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[16] Ibid.

[17] Ibid.

[18] Ibid., pp. 149, 150.

> by the power which he has acquired over himself and over his environment; and secondly, by his attitude towards the world in which he lives. If a man has strength which enables him to use all his energies and opportunities in the right way for his daily needs, then he measures up to the first half of the educational requirement. If he has a quick and ready sympathy with all this is good and honest and virtuous, and a love for progress and a willingness to help the work on, then he measures up to the second half of the educational requirement, and the man is educationally complete.[19]

The total of human knowledge was so vast and comprehensive that the student must exercise care in choosing those things which will best prepare him in terms of his needs, environment, and abilities. While the pursuit of many skills was fine in certain cases, a concentrated effort towards training in one field was more commendable. Dr. Widtsoe's approach was utilitarian. "By choosing studies that bear on some definite pursuit, you will be of direct and daily service to yourselves and your state. Be of use. It is not enough to be educated; you must be educated for something."[20]

> In choosing the work that you are to do in the years of your high school and college days, do not hesitate for a moment to choose studies with reference to the use to which they may be put in later life. If you intend to become teachers, and to give your lives to the teaching profession, then from the beginning choose such subjects as will enable you to reach the topmost place in that profession.[21]

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[19] John A. Widtsoe, Education for Necessary Pursuits, p. 18.

[20] Ibid., p. 21.

[21] Ibid., pp. 20, 21.

> All truth is good; but in life, the strength is with the man who knows one book well from cover to cover, not with him who knows the first chapters of a hundred books.[22]

V. EDUCATION FOR WOMEN

Dr. Widtsoe was a firm advocate of training and education for the women of the land.

> In these later years, under the growing wisdom of universal intelligence we have learned to understand that woman, like man, must be educated with due regard to her future profession, which in the majority of cases should be that of wife, mother, and mistress and queen of the home.[23]

A growing demand for equality of rights and privileges elevated the importance of training for both sexes. President Widtsoe recognized that women would attain distinction and acclaim in art, literature, the sciences as well as in industrial life, but he maintained that their place was primarily in the home. This was not construed to mean that the woman was to occupy an inferior position. On the contrary he extolled the great role and challenge of the homemaker.

> Let it be repeated here most emphatically, that as a result of the application of modern science and thought to the various phases of homemaking, it has been repeatedly demonstrated that there is no greater field for brain work than the industries of family life. Moreover, the work of the home reaches out and in a measure, controls and directs all other professions. Family life

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[22] Ibid., pp. 21, 22.

[23] Ibid., p. 34.

> is all inclusive--potent for health or disease, misery or happiness, success in its largest sense, or abject failure.[24]

At the Utah State Agricultural College over which President Widtsoe presided, education for homemaking rose to great dignity and importance. The State Legislature recognized the new movement and established the most complete and well equipped building in the West on the Utah State campus. In addition domestic science and arts was introduced into the grade and the high schools of the state to prepare the girls for the homemaking profession.

VI. AGRICULTURAL EDUCATION

Agricultural education was supported by Dr. Widtsoe for three major reasons:

> First, to devise and perfect satisfactory methods for the economical production of the plants and animals, whether of land or water, that are necessary to supply humanity with food, clothing and shelter.
>
> Second, to formulate systems of social relations that will make the open country attractive for family life, and thus make possible the permanent settlement of the vast unoccupied areas of the earth's surface.
>
> Third, to organize the existing body of human knowledge, or to discover new truths, so that the new profession of farming may be as inviting as any other profession in its returns in intellectual joy.[25]

As a resident of the State of Utah, Dr. Widtsoe could

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[24] Ibid., p. 35.

[25] Ibid., p. 79.

foresee the great potential land resources of the area. With thousands of acres of rich, fertile soil adjacent to wealthy mineral deposits, mining and agriculture could transform the state into a manufacturing center.

A return to the soil had been firmly advocated for many years not only as the key to the fullest enjoyment of life, but as a step in the development of the western empire. "The conquest of nature, once understood and tasted, becomes the great passion of intelligent man."[26] In furtherance of the development of this passion, agricultural studies in the elementary grades received the wholehearted approval of President Widtsoe.

> At the present time the children of the farmer and the artisan form a large portion of those who scarcely get beyond the eighth grade. Have we done our duty by this majority when we have failed to mention the value and possibility, in a systematic manner, of the life pursuits. Even more, it is in the lower grades, if the teacher is of the right kind, that love for later pursuits is awakened and directed. If, during the early years of the child's life, it is guided away from agriculture and the common things of life, it will be difficult for it to return in later years.[27]

VII. VOCATIONAL TRAINING

In the philosophy of John A. Widtsoe remote abstract teaching had its place and on occasion should be included in

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[26] Ibid., p. 47.

[27] Ibid., pp. 47, 48.

the block of instruction, but above all usefulness should be honored in the classroom. "When the science of the common things is fully understood, we may reasonably turn unitedly to the study of the faraway."[28] Like Pestalozzi and Froebel of earlier years, he solidly supported a curriculum which emphized training for life work whether it be in the professional, the agricultural, or the vocational areas. In tune with this philosophy vocational like agricultural education was encouraged on the elementary as well as the secondary level in order to meet the needs of many leaving before completion of advanced studies.

> If the majority of our boys and girls, from the necessity of nature, must enter the industrial pursuits; . . . . is it not our duty to direct the children into at least a partial knowledge of the beauty, dignity and possibility of the work that most of them will be obliged to do in later life? It will be a lifelong blessing for those who later enter the pursuits in question; it will strengthen those who enter the professions, for the work should be given in a strictly educational manner.[29]

Dr. Widtsoe realized the great obstacle in overcoming the shackles of tradition. With keen insight and understanding he was aware that such practical changes would only come about if non-teaching as well as teaching personnel were converted to the need of the change. The difficulties confronting educators did not dim his vision, however.

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[28] Ibid., p. 54.

[29] Ibid., p. 57.

> The glory of the future will be the man who, working with mind and body, bends the elementary forces of nature to his will. This master of the future will be strong and well balanced, simple in his manner of design and execution, and he will point the way to the dignity of common things. In himself he will represent the best that has been garnered from the treasures of the ages.[30]

In summarizing the value and need for vocational and manual training Dr. Widtsoe observed:

> The industrial development of the country requires that manual training be taught in the schools, elementary and advanced, because, first, there are in this country no organized systems like the apprentice system, for inviting and training craftsmen; second, the people are asking the schools to assume more and more of the burden of teaching the young for their life's pursuits; third, there is a growing identification of the home, the school, the shop, in which the school is assuming many of the functions of the shop and the home; fourth, the scientific basis given to the crafts by modern science requires the modern craftsman to be taught the why as well as the how of industrial operations, which can be done only in schools; fifth, the modern artisan must have a fair all-round education which can only be acquired in schools; sixth, most children leave school before their fifteenth years, and should then have received some industrial direction; seventh, it will produce people who, because of their early contact with tools and raw materials, will have a keener appreciation of the value of the craftsman's work; eighth, it will ultimately teach the relative places of the hand and the machine, and thus perpetuate the nation's joy in the products of the craftsman's skill; and ninth and finally, the greatest industrial countries of the world are those that have fostered manual training in the public school system.[31]

VIII. RELIGIOUS EDUCATION

Dr. Widtsoe was always glad that he had received religious instruction in the Bible during his early school years

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[30] Ibid., p. 66. [31] Ibid., pp. 77, 78.

in Norway and that his secondary school training had been received in a church school. "I have been throughout life an unchanging, firm believer in religious education for youth."[32]

> Even more, much more could be done within the public schools to teach morality and proper conduct. Ethics could well replace some subjects now taught. My day has cried for men and women with moral courage and stamina and an understanding of the principles of right and wrong. The doctrine treasured by some schoolmen, that if teachers are moral men and women, all will be well with the students, is but a dream, a phantom. In public schools ethics and character-building subjects should be given the dignity of curricular standing; and from the grades through high school and up, free hours should be available to students whose churches provide supplementary instruction in religion.[33]

Dr. Widtsoe was quick to realize the danger of the teaching of sectarian religion in the classroom, but firmly supported class work aimed at student training in the fundamental principles of spiritual development and growth. In 1935-36 he was appointed by the Mormon Church to inaugurate at the University of California a block of instruction dealing with the philosophy and program of the Latter-day Saint Church. This was the first attempt to acquaint the collegiate youth with the living religions of the nation, and it was initiated with a hope of advancing culturally and morally the welfare of the nation.[34]

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[32] Widtsoe, In A Sunlit Land, op. cit., p. 25.

[33] Ibid.

[34] Ibid., pp. 173-75.

Additional pertinent statements of Dr. Widtsoe on spiritual training included:

> Since man is not merely physiological, or intellectual, but also spiritual, our schools do not wholly suffice for the full training of man. Yet it is quite as natural for a man to desire religious education as to desire education for his body and mind.[35]

> The strongest defense of this or any other nation is not of sword and shot, of long range cannon and bombs from the sky. It lies in the spiritual domain of life, among the intangibles.[36]

> To be merely mentally trained is to be only partly trained. The man whose mind only has been trained may be likened to the ship with great engines and a huge propeller, ready to drive the ship forward, but without rudder, chart, compass, or definite destination. When we add to the man, so trained, spiritual training, then it is as if we add to the ship, with its wonderful machinery, a compass, a chart, a rudder, and a dependable intelligence which controls the whole machinery, above and below deck, so that the vessel may reach a safe haven, according to a definite purpose.[37]

IX. SUMMARY

In summarizing the philosophy of Dr. Widtsoe, it was evident that he was a serious proponent of educational training. The very future and fortune of the nation and the man were linked with education. A true and adequate education embraced a search for truth, a preparation and training in

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[35] L. D. S. Conference Report, October 7, 1922, pp. 45, 46.

[36] L. D. S. Conference Report, October 1940, p. 63.

[37] L. D. S. Conference Report, October 7, 1922, loc. cit., p. 46.

thinking and acting, and the assuming of responsibility. John A. Widtsoe was practical, however, in his interpretation of the purpose of the school system. While he extolled the eternal verities as a goal in education, knowledge and truth he believed should be functional. In line with this he proposed that education should be preparation for a specific skill and that usefulness above all should be honored in the classroom. Both vocational and agricultural education received considerable emphasis since they would in the course of events be the likely vocations of the majority of students on the elementary and secondary levels. The shackles of tradition had obscured the importance and beauty of technical and manual work. Dr. Widtsoe with keen insight and understanding wanted to bring to light their worth and intrinsic value.

John A. Widtsoe was a firm believer that women as well as men should be educated. While women were achieving distinction in many fields, their primary place was the home where training and competence were equally important and necessary.

He did not hesitate to attack educational inconsistencies and inadequacies. He criticized the wide demarkation between educational levels and the dangerous fetters of subject matter tradition. Subject matter and school itself were useless unless they directly or indirectly contributed to the broad educational goals of preparing the man to meet and

conquer his environment and self, and the development of those ideas and attitudes toward life which would be conducive to maximum happiness.

The duty of schools according to Dr. Widtsoe's philosophy were manifold. The schools served as a powerful defense during social or economic stress and moral decline. They were preservers of the democratic way of life. Ethical and spiritual development of youth was among their important obligations as well.

CHAPTER IV

UNIVERSITY PRESIDENT

On March 28, 1907, President W. J. Kerr resigned as President of the Utah State Agricultural College. During the same spring Governor John C. Cutler reorganized the Board of Trustees of the College which promptly elected Dr. John A. Widtsoe President of the agricultural institution. Prior to this time from 1900-1905 he had served the College in a very different capacity as Director of the Agricultural Experiment Station and at a still earlier period from 1894 to 1898, he was attached to the Utah State Agricultural College as professor of chemistry and chemist to the Experiment Station.

Having lived in Logan as a boy and young man and having served the institution for many years, John A. Widtsoe was naturally very concerned and interested in the welfare of the school. The decision to accept the presidency was not an easy one, however. Just two years before his selection as president, John A. Widtsoe and other members of the faculty had been forced to resign their positions due to an upheaval attributed to politics, a religion issue, the proposed educational policy of the president, and Logan's fear of losing the college through consolidation with the University of Utah.[1]

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[1] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 86.

In addition to the recent upheaval, appropriations of the College had reached a danger point, and there still remained the political unrest respecting the fear of losing the institution.

Notwithstanding this dismal prospect Dr. Widtsoe accepted and entered upon the work of President of the Utah State Agriculture College on July 1, 1907.

Because of the ill feelings and insecurity surrounding the consolidation movement, it was necessary to make a clear cut statement of the policy and purpose of the College in order to encourage its continued growth and expansion.

> This statement I could easily make, for I had long believed in the kind of education for which the College was organized. Its mission was to dignify and make more successful farming, mechanic arts, home economics, and commerce, the pursuits of ordinary men and women. This was to be done not merely by teaching the latest sound knowledge in these subjects, but also by offering to these classes the general cultural subjects which every citizen should know for his own happiness.[2]

> It is the policy of the Agricultural College of Utah, in accordance with the spirit of the law under which it is organized, to provide a liberal, thorough, and practical education. The two extremes in education, empiricism and the purely theoretical, are avoided, the practical being based upon, and united with, the thoroughly scientific. All the practical work, on the farm, in the orchards, gardens, dairy, commercial rooms, kitchen, sewing machine shops, is done in strict accordance with scientific principles. In addition to the practical work of the different courses, students are thoroughly trained in the related subjects of science, and in mathematics, history, English, and modern languages. While the importance of practical training is emphasized, the disciplinary value of education is kept constantly in view. It is recognized that

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[2] Ibid., p. 100.

> the mind, the eye and the hand must be trained together to secure symmetrical development. The object is to inculcate habits of industry and thrift, of accuracy and reliability, and to foster all that makes for right living and good citizenship.[3]

Convincing of the Board of Trustees was a relatively easy task, but winning the approval of officials and citizens of the state required the utmost care and persistence. Many reports were written, tours were taken, and carefully prepared speeches were given on the goals and accomplishments of the Logan school. Among the many groups which had to be converted was the Logan people who remained as a whole unfriendly to the administration. A local newspaper, the Logan Journal, continued to harass the new administration suggesting that a Republican state program was responsible for the changes at the College. Businessmen who still visualized an expanding campus and increased prosperity were very critical and resentful. Many other minor cliques and groups were, also, very skeptical of the new administration. At best even with the support of most of the average, non-vocal people, the College had just a half-hearted support from the town.[4] Certainly the task ahead was anything but simple and easy.

After the first few months of Widtsoe's administration, the biennium report to the governor and the legislative assembly of Utah was published for the years 1907 and 1908. The

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[3] Biennial Report, Board of Trustees of Agricultural College of Utah, 1907-1908, General Information Section, p. 19.

[4] Widtsoe, In A Sunlit Land, op. cit., pp. 101-103.

optimistic and favorable attitude existent even after this short period of time was reflected in the message:

> We have pleasure in reporting a surprisingly large increase of students during the past two years; and also that the grade of the students entering the College is very much higher than in the past. At the present writing, the number of college students is 35 per cent larger than the highest number recorded in any previous biennium. . . . The growth of the agricultural work has been especially gratifying, for, during the biennium, the number of students taking agriculture has more than doubled.
>
> The Faculty has been strengthened and in part reorganized to meet present conditions; and a definite industrial policy, resting upon sound educational ideals, has been adopted for the whole Institution. Internally, the condition of the College is excellent. The discipline of students and Faculty is of the best and harmony prevails among the Trustees, Faculty and student body.[5]

President Widtsoe in his biennial report to the Board of Trustees, also, expressed enthusiasm and confidence in the progress made and the future of the school. Numerous inadequacies did not escape the careful scrutiny of Dr. Widtsoe. For example, the lack of permanency of the Faculty was regarded as one of the more serious weaknesses of the institution. Low salaries, the presence of men little interested in the West were attacked as primary causes of the transient condition of the faculty members. Only after years was it possible to secure fixed salary schedules with reasonable allowance. A sabbatical leave program was, also, instituted in order to provide time for additional training and research as well as

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5 Biennial Report for 1907-1908, op. cit., pp. 1, 2.

freedom from the routine of instruction. Dr. Widtsoe's recommendation was adopted as follows:

> The Institution establish what is called a sabbatical year with the following regulations: That it be the policy of the Institution that Heads of Department, who have been in continuous service for a period of six years, should be allowed on recommendation of the President and consent of the Board of Trustees, leave of absence for one year with half pay for the purpose of continuing their studies in other Colleges or Universities.[6]

Such men as Dr. Franklin S. Harris, Dr. George R. Hill, Dr. Reuben L. Hill, Dr. Robert J. Evans, Professor Byron Alder, Dr. Ernest Carroll, and Dr. C. N. Jensen went east to study for advanced degrees returning later to teach in the College.[7]

Even by the close of 1912 the President's policy with respect to faculty members was showing results. At that time he reported:

> A vigorous attempt has been made, therefore, during the last five years, to secure permanency in the Faculty, and to increase the scholarship of the teachers. Both these attempts have been measurably successful. By encouraging western men to go away to study, and then employing them as they returned, a faculty has gradually been built up, whose chief interests are in the West, and who are not so likely to leave the institution because of slight differences in salary or opportunity.
>
> The scholarship of the Faculty has been greatly advanced during the last two years. . . . More than forty

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[6] Minutes Board of Trustees, 1910-1925, April 3, 1914, p. 124.

[7] Joel E. Ricks, A History of Fifty Years (Salt Lake City: Deseret News Press, 1938), p. 79.

> of the world's leading colleges and universities are represented on the Faculty. Of the seventy-six men and women who do the instructional work, twenty-six are professors; of these twelve hold doctor's degrees, fifteen hold master's degrees, five hold bachelor's degrees, all have done post graduate work.[8]

Again in 1914 Dr. Widtsoe commented:

> The resignation of a professor is an unusual event. . . . By training and temperament the Faculty compares favorably with the best and is well fitted to conduct investigations and to give instruction in the subjects assigned by law to the College. Moreover the longer tenure of office, resulting in closer associations of the professors with each other and with the work of the College, has led to a more perfect unity of understanding and purpose. Every member of the Faculty has entered into the spirit of the Institution, and nearly all feel that it is good to apply all their training to the industrial growth of the state.[9]

I. EXPANSION AND GROWTH AT LOGAN

President Widtsoe in the report of 1907-1908 listed expansion and growth as basic tenets of the college. There was an increasing need for more room, apparatus, livestock, and agricultural facilities. In the field of veterinary science, crowded conditions detracted from the efficiency of the instruction and observation of diseased animals brought to the school. A veterinary hospital and inspection sheds were vitally needed to alleviate this problem. A new building for instruction in agriculture was, also, badly needed. In

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[8] Biennial Report for 1907-1908, op. cit., p. 79.

[9] Ricks, loc. cit.

summarizing, the building program during the administration of President Widtsoe in general harmonized with the educational policy.

> If certain fields of knowledge were to be stressed then the proper housing of those departments was necessary. In 1909, the Dormitory was remodeled as the Woman's Building. This was to house the work in the Domestic Art and Science. In 1912, the Smart Gymnasium was completed, giving an emphasis to physical education and athletics incomparably greater than before. The structure was erected as a result of a legislative appropriation, a liberal gift of Mr. Thomas Smart, a Trustee from Logan for whom the building was named, and a generous gift from the students. The expansion of the work in Mechanic Arts required more building space and in 1913, second stories were added to the left and right wings of the structure as a result of a legislative appropriation of $9,000. The same legislature appropriated $55,000 for the erection of a chemistry building which was not completed, however, until 1916 and later was named Widtsoe Hall. The College soon outgrew the small field for athletic purposes and through the activities of Trustee John Q. Adams and the L. D. S. Church authorities the College secured a lease of the Logan Fifth Ward Square, for twenty-five years at an annual rental of twenty-five dollars beginning in 1913. Mr. Adams generously paid the lease and the field was named Adams Field.[10]

Academic changes were necessary in the expansion plans of Dr. Widtsoe. Concerning material changes in entrance requirements President Widtsoe said:

> A notable departure during the last few years is the raising of the requirements of the College. The Institution has always attempted to meet the specific needs of Utah. In the early history of the College, therefore, it was felt that the entrance requirements should not be so high as to discourage students in a state where the high school system was poorly developed. When the high schools began to multiply throughout the state the

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[10] Ibid., p. 83.

> entrance requirements were raised. This has already resulted in good, though it would have been unwise to have attempted it earlier.[11]

In the year 1913-14 the first year of high school was discontinued at the Utah State Agricultural College. During the years that followed the number of students enrolled for high school courses continued to decrease while those enrolled with college status continued to increase. In the same year, 1914, entrance requirements to take regular college courses were four years of high school. Commenting on this change President Widtsoe made the following observation:

> I breathed more freely that year. With the raising of faculty scholarship and entrance requirements, the College could claim standard recognition among the sisterhood of institutions of higher learning.[12]

II. EDUCATION FOR WOMEN

The education of the women as well as the men had always claimed the attention of John A. Widtsoe as essential to the welfare of the home and the state. The School of Domestic Science had been established on the Utah State Agricultural College campus expressly for that reason.

> First, it aims to train women to be homemakers who understand the principles involved in the work of the house--the cooking of foods, the sanitation and ventilation of the home, the rearing and care of children,

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[11] Biennial Report, Board of Trustees, 1911, 1912, pp. 6, 7.

[12] Widtsoe, In A Sunlit Land, op. cit., p. 108.

> the adornment of house and person, and so on; secondly, to enable women to learn something of domestic science, and at the same time to acquire skill in some profession by which women may earn their living directly.[13]
>
> Women are now coming quickly to understand the value of such special education and the great power of their position as the mothers and makers of the race. When every mother knows the laws of health, more children will be strong. When every mother is broadly and sympathetically trained in the application of science and arts more children will be intelligent.[14]

In order to meet the demands for courses in home economics, a building for instruction was temporarily arranged through conversion of the old dormitory. On the national level Reed Smoot converted to the cause of home economics by Mrs. Eudora Widtsoe, wife of the President, introduced a bill in the United States Senate. For several years the measure didn't pass, but eventually the Parnell Act emerged as the first of its kind in support of home improvement. This act pioneered federal support of home economics and did much to establish and strengthen the position of domestic science on college campuses.

In the Presidential report of 1907-1908 Dr. Widtsoe regretted the decline in the status and accomodations of the School of Domestic Science.

The equipment of the School of Domestic Science is

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[13] Trustee's Report, 1907-1908, op. cit., p. 19.

[14] John A. Widtsoe, "Church School System," The Improvement Era, 6:702, August, 1923.

> unworthy of the Agricultural College. The rooms devoted to domestic science proper--kitchens and dining room--are located in the basement in rooms that can not by any device be made home-like and cheerful. The domestic arts department is somewhat better located, but in that department also, the rooms are not well suited to the work. The equipment is meager and generally old-fashioned. The department was located as it now is, fifteen years ago, and few material additions have been made to it during that time. At one time the School of Domestic Science of the Agricultural College of Utah with respect to its equipment was said to be the best in the Western country. It is with regret that it must be confessed that we have no longer any claim to such a title.[15]

Two years later President Widtsoe reported:

> During the last biennium the School of Home Economics has undergone a complete reconstruction. The work in homemaking and housekeeping was inaugurated at this Institution during the first year of its history. . . . In harmony with this modern view and demand the last Legislature generously appropriated money sufficient for the remodeling of the old dormitory, which had never been successful, into a modern woman's building. The change was completed nearly a year ago at a somewhat higher cost than was expected, but with the result that the State now possesses one of the most modern and satisfactory buildings for the teaching of domestic science and domestic art in the western states.[16]

In keeping with the policy of growth and expansion of the school remodeling, improved instruction, faculty and equipment additions were essential to the progress of the school. Attendance continued to increase and reports on instruction indicated success of the department.

> In spite of its relatively low cost of maintenance, the work of the College is of high excellence. The

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[15] Trustees' Report, 1907-1908, op. cit., p. 21.

[16] Trustees' Report, 1909-1910, pp. 19, 20.

> investigations of the Station are famed the world over; the graduates of the College are sought for in and out of the State; and the extension work ranks with the very best in the land.[17]

III. ACADEMIC PROGRESS

Such was the optimistic appraisal of the College by President Widtsoe in his biennial report to the Board of Trustees in 1914. During the same biennium the group elective system had been adopted providing each student during his college career with a sampling of all the major fields of knowledge. Academic standards had been increased; work at the experimental station was justifiably receiving favorable attention, farmers' institutes were continued and expanded, the Utah State Agriculture College Farmers' Round Up, a two-week program of instruction and discussion during the January slack season, was created and the extension division received additional support and assistance.

The growth of the extension division illustrated the remarkable strides of the college during the nine-year stay of Dr. Widtsoe.

> The growth of extension work in agriculture and home economics is the most remarkable educational manifestation in the United States, today, and the achievements in extension work are a herald of the time rapidly approaching when the blessings of education will be laid at the door of every man and woman who desires them.

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[17] Trustees' Report, President's Report, 1913-1914, pp. 4, 5.

> All the ideals of American democracy are very closely interwoven in the fabric of education at the Agricultural College of Utah, especially as regards its work on the farms and in the homes of the people.[18]

The 1916 Buzzer, student yearbook at the Utah State Agriculture College, dedicated a page to the retiring President, John A. Widtsoe, for the accomplishments and contributions of his administration.

> To Dr. John Andreas Widtsoe,
>
> Who, acting as president of the institution for the past nine years, has been a leading factor in the growth, development, and widespread popularity of our college, we respectfully dedicated this volume.
>
> Though he now leaves us to devote his time and talent to that of our sister institution we still solicit his interest and are confident that he will remain our friend.
>
> During his administration at the Agricultural College, Dr. Widtsoe has been a constant source of inspiration to the student body. His kindly spirit and pleasant personality have soothed the worries and troubles of many students while his firm leadership and stalwart character have been constant ideals to all who knew him. We regret his leaving us but appreciate the merits of his association.[19]

IV. A SOJOURN AT THE UNIVERSITY OF UTAH

In the spring of 1914 an academic scandal had rocked the very foundations of the University of Utah. Recommendations to the Board of Regents had been made concerning the

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[18] Trustees' Report, President's Report, 1915-1916, p. 11.

[19] Buzzer, School Yearbook of Utah State Agricultural College, 1916, p. 4.

dismissal of four professors and the demotion of another. Many of the remaining members of the faculty bitterly resented the action, seventeen of whom resigned in protest of the move. To add fuel to the fire, Osborne J. Widtsoe, brother to John A. Widtsoe and Bishop in the Latter-day Saint Church, was tendered the position of head of the English Department to succeed the man recently demoted. Notwithstanding the qualifications of Professor Widtsoe, a few troublemakers suggested that Church interference was behind the episode. Efforts were made to resolve the dissension and restore faculty and administrative harmony. Dr. Widtsoe realized that much of the load of this challenge rested upon him if he accepted the presidency of the University.

Thus the decision to leave the Utah State Agricultural College was not an easy one. Dr. Widtsoe was well respected in Logan as the leader of the college. Persistent work on behalf of the institution had brought it national and local recognition. In addition, to accept the position at the University of Utah would mean a reduction of salary. Notwithstanding these drawbacks Dr. Widtsoe accepted the call, launching with vigor into the responsibilities and duties of the new position.

Faculty co-operation and respect was a primary goal for the new administration. Events of the last few years had badly shaken the teaching staff and built up a feeling of

tension and unrest among them.

> At the most ordinary contact, these people quivered with anxiety. However, as they discovered that open sincerity was to guide university affairs, they settled down to their work at ease. The past was gradually forgotten. The new events of the day entered the center of the stage.[20]

In his report to the Board of Regents President Widtsoe made mention, too, of the fine support and wholehearted backing of the alumni association[21] whose lack of assistance would sorely handicapped the progress of the institution. Another step proved of special importance in establishing a working relationship among faculty, regents, and other employees.

> Almost my first task, even before entering officially upon my University duties, was to formulate a series of Board rules and regulations for the guidance of all connected with the institution. These rules were printed and have been in force ever since, with such amendments as the years have brought. The consequent certainty and order made me feel easier about my work, and, in fact were a protection to the university family.[22]

V. ADVANCEMENT AND GROWTH

The University of Utah had confined its educational activities almost exclusively to the campus and the Salt Lake City area. Being a State institution, the university had an

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[20] Widtsoe, In A Sunlit Land, op. cit., p. 132.

[21] President's Report, 1916-1918, p. 16.

[22] Widtsoe, In A Sunlit Land, op. cit., p. 134.

obligation to all the residents of the state interested in preparing themselves academically. In order to realize this goal President Widtsoe recommended that an Extension Division be created to furnish educational opportunities statewide.[23] By correspondence work, traveling faculty members, and other means classes were provided in a number of fields, notably in such fields as health education. In commenting on the extension work Dr. Widtsoe said:

> The Extension Division has grown to become a very important part of the university's service. In Salt Lake City and beyond it has brought the institution and the people closer together, and has also provided cultural enjoyment, which otherwise might not have touched the State.[24]

During the administration of Dr. Widtsoe the four-quarter system was established on the university campus. This was deemed advisable in order to facilitate crop production and care during World War I and afterwards.

> The four-quarter plan possesses the flexibility needed at this time because it provides the beginning of classes in the fall, early winter, and early spring which may be complete with the securing of proper credit after approximately twelve weeks of study. The student who is obliged to remain on the farm in the fall, to harvest crops, may, under this plan, enter upon his school work at the beginning of the winter quarter. Should the planting season begin early, he may leave at the beginning of the spring term, having a third of the year's work to his credit, but should the spring season be late, he may continue to the end of the spring quarter, and complete two-thirds of

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[23] President's Report, Utah State Agricultural College, 1914-1916, pp. 12, 13.

[24] Widtsoe, In A Sunlit Land, op. cit., pp. 135, 136.

a year's work.[25]

During World War I another important change was noted with respect to course work. An organized military corps was established on the campus to meet the national needs for leadership and training during the crisis of the war. High school graduates were notified of the great advantages associated with the program.[26] The War Department sent out a report in explanation of the move.

> You serve your country by going to college. To make sure that you do not lose thereby the opportunity of serving you will be enrolled in the special United States Army College Training Units that are to be formed. You will be liable for service at a moment's notice, but because you are worth more to the nation with your college training than without it, you will be expected to stay in college until called by the government.[27]

At the opening Student Army Training Corps ceremony further mention was made of the need for the training corp and its implications for education.

> Never before, however, as today, has our system of education been put to a supreme test. Our country is engaged in a world war upon the issues of which depend our national existence and the political freedom of mankind. Out of the universities and colleges have gone thousands of American youths to apply their trained minds and bodies to the winning of the war. And now, when the call for leadership has become more insistent than ever, the institutions of learning are bidden to supply the need irrespective of established procedures or special organizations for such a purpose.

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[25] "The Four Quarter Plan of University Operation During the War and After," Journal of the National Education Association, Vol. II, No. 4, December, 1917.

[26] University of Utah Bulletins, "College Training Unit," 1916-1919, p. 2.

[27] Ibid., p. 3.

> This is a great recognition of the importance of schools in a democracy; it reveals the confidence of the people in the adaptability and power of institutions flourishing under a free government; it is a fine compliment to the educational struggles of the past; it makes permanent the place of the University in the nation, our educational hope has been realized if we rise to the occasion and fully meet this supreme test.[28]

At the close of President Widtsoe's administration in 1921 much had been accomplished toward the expansion and development of the university. The number of college students enrolled in regular attendance had increased from 966 to 1682[29] with the freshmen enrollment alone being over the 1,000 mark.[30] In extension work, too, much had been done with registration increasing it from 383 to 1844.[31] The School of Commerce had been organized.[32] This school was meeting one of the great needs of the state in providing trained leadership in industry and commerce to meet the challenge of an undeveloped state. Agriculture provided the tools with which business could now blossom.

A public health compaign had been launched resulting

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[28] Address of John A. Widtsoe given at the opening Student Army Training Corps ceremony, 1917.

[29] "Information Concerning the University of Utah," Bulletin Vol. XI, No. 16, January, 1929.

[30] Chronicle, University of Utah student newspaper, March 22, 1922.

[31] "Information Concerning the University of Utah," loc. cit.

[32] President's Report, 1916-1918, op. cit., pp. 11, 12.

later in the creation of the Department of Public Health and Preventative Medicine.[33] The Board of Regents authorized many notable advances, chief among them being "A series of surveys of State resources, material and social, for the economic development of the State."[34] This study further broadened the economic and agricultural horizons of the state, and paved the way for expansion and growth in these areas. A number of buildings and improvements were erected during the period of service of President Widtsoe. These included the observatory building, the medical building, the Stewart training school, and the dining hall.

VI. SUMMARY

In summary, the administrations of Dr. Widtsoe at the Utah State Agricultural College and the University of Utah had been characterized by unsettling circumstances including a national crisis, but the contributions and progress made were significant. At both institutions student registration had markedly increased. At the Logan school President Widtsoe met the apprehension of the faculty, townspeople, and businessmen to carry out a policy and plan of action noted for its able leadership. Problems concerning permanency of faculty,

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[33] Ibid., p. 12.

[34] President's Report Commencement Exercises, June, 1919, p. 25.

standards of scholarship and entrance requirements were resolved satisfactorily. At the Utah State Agricultural College emphasis was placed on the well-educated woman along with the man, and efforts were made to provide the latest equipment and facilities to achieve this end. In the area of agriculture the farmers' institute and other former practices were continued and expanded while the Experiment Station furnished reports and experiment data which furthered soil and land management.

At the University of Utah, Dr. Widtsoe, also, unified and organized the faculty and administration under able leadership. A very important step was made in the creation of the Extension Department which provided statewide educational opportunities. The four-quarter system was established in order to facilitate crop production. A Student Army Training Corps was instituted on campus to meet the national need for military leaders. A School of Commerce had been organized and was successfully operating. A public health campaign had been waged; survey studies of state resources had furnished valuable data; and a number of major building projects had accelerated the growth and expansion of the University of Utah.

CHAPTER V

AN AGRICULTURAL LEADER

During his undergraduate days at Cambridge, Massachusetts, and Harvard University, John A. Widtsoe made the decision which launched him into the fields of agriculture and soil conservation. At Harvard "I had decided to follow the prescribed course in chemistry . . . I could teach chemistry, or practice it in mining or manufacturing. There were several strings to the chemical bow."[1] While Dr. Widtsoe was first and foremost an educator, he achieved distinction in other areas, often as a direct result of his teaching activities.

I. CHEMIST TO THE EXPERIMENT STATION

With a bachelor's degree in chemistry, he was immediately accepted upon graduation as a member of the faculty of the Utah State Agricultural College as professor of chemistry and chemist to the Experiment Station.

A series of Experiment Stations had been established by Congress in connection with the agricultural colleges to investigate and study all possibilities for the improvement and advancement of agriculture. As chemist to the station, young Widtsoe was confronted with the great challenge of the work.

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[1] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 31.

Certainly Utah soils, water sources, and farming techniques presented an especially fertile area for research and development. So to the task at hand he plunged with zeal and enthusiasm.

Up until that time most of the experimental work with soil had been confined to the College farm.

> I broke that precedent and travelled over the State, made observations and took soil samples in many parts of the state. Some of the results, many of them unique in that day, were published in bulletin form or in chemical journals. The great variety of the soils of the State, and the astonishing fertility of some of them, led to the formulation of suitable cropping systems.[2]

One of the important contributions of John A. Widtsoe while associated with the Experiment Station was the study made in connection with lucern or alfalfa. Being a very necessary plant to Utah soil and the chief forage crop of the state, lucern, its composition and growth habits were of significance to land and livestock owners. In a series of bulletins entitled "The Chemical Life History of Lucern," some valuable findings were published including:

1. The total dry matter of the lucern crop increases to the death of the plants.

2. The greatest gains of dry matter occur during the week between budding and medium bloom; after late bloom the gains are insignificant.

3. The nitrogen-free extract increases in total quantity to the death of the plants; pound for pound,

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[2] Ibid., p. 48.

however, the quantity grows less as the plant grows older.[3]

In addition information relevant to beef producing power, time of cutting, distribution of albuminoids, etc. were also included in the findings.

Other important studies and reports were made concerning sugar beets, soil composition, waters of the State, etc.[4,5]

During the summer of 1897 farmers' institutes were held in most of the towns in southern Utah. Joseph Jenson, Professor of Mechanical Engineering, and John A. Widtsoe in charge of the institutes made careful observations of their travels and dreamed of the time when the millions of acres of barren land in Utah would be under cultivation.

Dr. Widtsoe had industriously pursued his work at the Utah State Agricultural College and the Experiment Station. The four years had broadened his vision, solidified his convictions of the value of the land, and kindled an increasing interest in agricultural chemistry. Agricultural and biochemistry fascinated him and it was decided that advanced training in that field would make his services of more value

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[3] John A. Widtsoe, "Chemical Life History of Lucern," Experiment Station of the Agricultural College of Utah, Bulletin 48, 1897, p. 68.

[4] John A. Widtsoe, "Utah Sugar Beets," Experiment Station of the Agricultural College of Utah, Bulletin 53, February, 1898.

[5] John A. Widtsoe, "The Chemical Composition of Utah Soil," Experiment Station of the Agricultural College of Utah, Bulletin 52, January, 1898.

to the college and to the state. So, in August of 1898, John A. Widtsoe with wife of a few weeks left the United States for Germany in search of the latest truth and discoveries.

Mention has already been made of the profitable period of study at the University of Goettingen, Germany, in the laboratory of Bernhard Tollens. Choosing physics and mineralogy as minors and with traganuth gum (tragacaemuth) as the topic of his dissertation, John Widtsoe completed his studies receiving the degrees master of arts and doctor of philosophy. For the next few months further study was pursued in Berlin, Switzerland, and London.

II. DIRECTING AN EXPERIMENT STATION

In September, 1900, soon after returning from Europe, Dr. Widtsoe assumed the directorship of the Utah State Agricultural Station. Having served on the staff before, he was familiar with its organization and function. The work ahead was much to his liking.

> I had become convinced that people must live together in communities drawing their sustenance from nearby land, if a state acceptable to civilized man is to be build and maintained. My own observation led me to believe that such a commonwealth can not rest upon mining or manufacturing alone. These activities prosper best in the wake of agriculture, which is the beginning of economic, social, and political wisdom.[6]

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[6] Widtsoe, In A Sunlit Land, op. cit., p. 73.

The geography of Utah with its sharp land contrasts of mountains and valleys, and with its relatively low rate of precipitation presented a very engaging study--conquering the desert was no minor undertaking. However, with the co-operation of the agronomy, chemistry, and irrigation engineering departments an enthusiastic venture was begun. The study that followed produced much valuable and useful information concerning:

> . . . the movement of water in irrigated soils; the control of loss of soil moisture by seepage and evaporation; the relation between the water lost by evaporation from soils, and by transpiration; the actual quantities of water required in crop production; the yield of crops and their chemical composition under varying quantities and times of application of irrigation water; and many other irrigation problems.[7]

Two major conclusions were reached; first, that irrigation crop quantity and quality can be controlled; second, by careful, discreet use of water available the area under cultivation can be greatly increased.[8]

Recognition by the United States Office of Irrigation Investigation of this study and subsequent monetary contributions by the same organization paved the way for additional research. In 1905, under state authorization, nine farms in various parts of the state were cultivated to determine the practical value and the scientific shortcuts to irrigation.

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[7] Ibid., p. 75.

[8] Ibid.

Their findings pioneered the study in this area and aided greatly the farm groups in the conquest of the desert.

Closely related to irrigation was dry farming which posed another answer to Utah's scanty rainfall. While irrigation projects could supply for a small percentage of Utah's barren land, there still remained hugh uncultivated tracts of land. Under the direction of Dr. Widtsoe detailed studies were carried out pursuant to this problem. The findings published in bulletin form were very informative. An excerpt from the general conclusion suggested the value of the study.

> 1. There are vast areas of land in Utah that will not for many years be brought under irrigation; there are many others that, probably, will never be irrigated. These lands in most cases would make splendid dry or arid farms.
>
> 2. The term "arid farming" is preferable to "dry farming"; and it is hoped that the farmers of Utah will adopt it.
>
> 3. Under a wasteful system of irrigation, where, however, no water is allowed to run off the soil, about 1200 tons of water are necessary to produce one ton of the ordinary crops.
>
> 4. The average rainfall in Utah is a little more than 12 inches. This amount of precipitation should produce on arid farms, with proper tillage, not less than 15 bushels of wheat to the acre.
>
> 5. The temperature and sunshine conditions of Utah are favorable to arid farming.
>
> 6. Utah soils are very deep, and allow, therefore, the storage of large quantities of water in them.
>
> 7. Nearly all Utah soils contain much water to a depth of at least 10 feet.
>
> 8. An underground soil survey, made with the aid of

augers, should always be made of arid or irrigated farms.

9. Arid farm wheat appears to do equally well on sandy, loamy, and clayey soils.

10. The northern and central portions of Utah seems well adapted to arid farming. Arid farming will probably be successful, also, in the southern, eastern and western portions, though crops could not be obtained from the land so often as in the north.[9]

The practicability and the necessity of irrigation and dry farming became one of Dr. Widtsoe's major concerns. His personal as well as scientific writings revealed his feelings and vital interest.

> The biggest thing in my line of business is to help build a science of agriculture adapted for countries where the rainfall is comparatively low. Agriculture is essentially an applied art. The principles of science, any and all, are used so far as may be possible to the production of plants and animals. Modern agriculture was built in countries of abundant rainfall. . . .
>
> However, more than one-half of the earth's surface receives less than twenty inches of rainfall annually, and is, therefore, arid. . . .
>
> Dry-farming and irrigation are the supplementary arts that will reclaim the "deserts" of the world. Irrigation is the more important in the building of great commonwealths; for in the irrigated sections the great cities of arid regions will arise. Yet when all the flood and river waters of the arid regions shall have been stored in mighty reservoirs and brought to the farm by properly constructed canal systems, less than one-tenth of the arid region of the world shall be under irrigation. The other nine-tenths, if they are to be reclaimed at all, must be reclaimed by the methods of dry-farming, which depend

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9 John A. Widtsoe, Lewis A. Merrill, "Arid Farming or Farming Without Irrigation," Experiment Station of the Agricultural College of Utah, Bulletin No. 75, January, 1902, pp. 115, 116.

upon the natural rainfall alone.[10]

To better acquaint the farming population with the most recent methods and techniques in successful farming John A. Widtsoe, Lewis A. Merrill, and J. Edward Taylor published an agricultural weekly, "The Deseret Farmer." Prejudice and distrust of "bookfarmers" had to be overcome, too, during that period and a personal magazine like "The Deseret Farmer" played an important part in alleviating this problem. Dr. Widtsoe himself published many articles in the magazine concerning agricultural issues and questions.[11] The support and confidence of the farming people of the state had to be won and every conceivable method to achieve this end was employed.

III. ADMINISTRATIVE LEADERSHIP AND AGRICULTURE

In 1905 political reasons led to the dismissal of a number of the faculty members of the Utah State Agricultural College including John A. Widtsoe. The following fall of the same year Dr. Widtsoe became affiliated with the Brigham Young University at Provo where he continued in his agricultural endeavors and was instrumental in organizing a department of agriculture.

Assisting him in the work were Professors Lewis A.

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[10] Article in The Spokesman-Review (Spokane, Washington), June 7, 1912.

[11] Widtsoe, In A Sunlit Land, op. cit., pp. 78, 79.

Merrill and William H. Homer, Jr. who were hired part time to assist in the teaching, Professor Merrill laboring in animal husbandry and Professor Homer in horticulture. Dr. Widtsoe taught general agriculture and agricultural chemistry.[12]

In connection with the agriculture work, farmers' institutes were held and extension work was furthered.

The call to the president's chair of the Utah State Agricultural College in 1907 to some degree limited Dr. Widtsoe in pursuing his agriculture activities, but in many ways additional opportunities presented themselves. As head of the state agricultural school, Dr. Widtsoe was in an advantageous position to influence the farming generation of the day and the students aspiring to be the farmers of tomorrow. Part of this influence was suggested by written and spoken statements in which he exalted the lot and station of the farmer.

> Of the professions that give independence, farming stands among the foremost in its possibilities of ease of attainment, large returns, healthful living, intellectual and physical labor well blended, and direct relations with nature and her ways.[13]

> The sport of cultivation commands and brings into active service a host of natural laws and living organisms that can prosper only within a well cultivated soil.

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[12] Ibid., p. 92.

[13] John A. Widtsoe, "An Example for City Wage Earners," The Deseret Farmer, September 26, 1908.

> Whenever the plow turns the furrow, or the hoe loosens the soil, the old command rings out, "Be fruitful and multiply." He who holds the plow or wields the hoe becomes a king because he is obeyed with an obedience that never fails.[14]

> The general trend has been away from the farm into the so-called learned professions, or later, into engineering or other pursuits that are looked upon as being more suitable for the trained intellect. It is equally true that today there is a return, on the part of the better educated, to the practice of agriculture. The thinkers of the age have noted the evil effects of the unnatural conditions prevailing in the crowded cities and in the professions that take man away from personal contact with nature. Students of psychology and physiology, alike, are beginning to agree that man is not essentially a house animal. He was made for the soil and the air and the sunshine and the clear water of the mountain streams. His house is for shelter. His work should be done very largely out of doors. Dusty and impure air leads to disease; the fresh air untouched by man's devices leads back to physical vigor and the revelations that we call inspirations of genius. . . . We have become so steeped in the complexity of the cities that we can no longer enjoy simple pleasure.[15]

> The conquest of nature, once understood and tasted becomes the great passion of intelligent man.[16]

While at the Utah State Agricultural College, President Widtsoe initiated several programs which more closely united the farming element of the state. The Farmers' Round Up was established during the farmers' slack season, soon after the Christmas holidays. Unusual support attended this function

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[14] John A. Widtsoe, "The Kingly Sport of Cultivation," The Deseret Farmer, May 14, 1910.

[15] John A. Widtsoe, Education for Necessary Pursuits, College Bulletins Vol. 12, No. 5, January, 1913, pp. 44, 45.

[16] Ibid., p. 47.

as farmers and their wives came from all parts of the state to participate in the instruction and discussion. The success was significant enough to justify the establishment of a Round Up in southern Utah at Richfield.[17]

Extension work continued to reach all those throughout the state who were interested in enrolling. In addition faculty members were sent to different parts of the state to conduct study groups for the advancement of education and agriculture.

In 1913 at the 25th anniversary celebration of the Utah State Agricultural College a new practice was established.

> A half dozen practical farmers, to whom college opportunities had not been available, were honored. They were to represent the farmers of the state. Upon each one was conferred the degree of Master Farmer. That they were entitled to this recognition was evident from the quality of their farming operations.[18]

During the same period Utah recognized the need of trained men placed in areas of need to advise and direct the farmers in their activities. This led to the appointment of Luther M. Winsor as County Agricultural Agent to the Uintah Basin area. Other qualified men were subsequently named to direct in needy areas. This was believed to be the beginning of the county agent movement in the United States.[19]

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[17] Widtsoe, In A Sunlit Land, op. cit., p. 110.

[18] Ibid., p. 114.

[19] Ibid.

IV. MISCELLANEOUS ACTIVITIES

In the field of agriculture Dr. Widtsoe became well known as a writer as well as a leader in the field. At the request of Dr. Bailey, Dean of Agriculture at Cornell University, John A. Widtsoe completed a book in 1910 entitled Dry Farming, A System of Agriculture For Countries Under A Low Rainfall. Being one of the first books dealing with the principles of dry farming, it became in its field a very popular text and was eventually translated into French, Spanish, and Italian. The Principles of Irrigation Practice, another pioneer in its field, was written by Dr. Widtsoe and published in 1912 by the Macmillan Company.[20]

Irrigation and dry farming grew progressively more important to Utah and to the western states. To coordinate ideas and bring together authorities in the field an Irrigation Congress and then a Dry-Farming Congress were organized. Dr. Widtsoe served as vice-president to the irrigation group and was president of the Dry-Farming Congress in 1912 when the conference was held in Lethbridge, Canada.[21]

Among his many and varied pursuits, Dr. Widtsoe served for many years as director of the Chemurgic movement which attempted to improve agriculture by the scientific application

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[20] Ibid., p. 118.

[21] Ibid., p. 119.

of chemical principles.

Many commission memberships related to agriculture were tendered Dr. Widtsoe. Governor Charles R. Mabey placed him on the State Water Storage Board on which he served from 1921 until it was dissolved in 1941. Governor Herbert B. Maw appointed him to the Utah Water and Power Board in 1947.

In 1922 Hubert Work, then Secretary of the Interior, called seven men to investigate some of the activities and policies of the Reclamation Bureau. Among those invited to work on the committee was John A. Widtsoe who became the vice-chairman and secretary of the group charged with the responsibility of compiling the data and making a report of the investigations. Through the efforts of the committee miscalculations amounting to $28,000,000 were discovered and much valuable information gathered. Congress published the results of the study under the title "Federal Reclamation by Irrigation." Dr. Widtsoe later compiled his own conclusions of the work of the Reclamation Bureau in the book Success on Irrigation Projects.[22]

While most of John A. Widtsoe's agricultural activities were confined to Utah and the western states, on occasion he was called to serve in other parts of the nation as in the case of the reclamation study in Washington. Through his publications and leadership he became recognized nationally and

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[22] Ibid., pp. 181, 182.

internationally as an authority in the field. As a recognition of his accomplishments and expertness in agriculture, the province of Alberta, Canada, called for his professional services in connection with the Lethbridge Irrigation Project which was failing. A report that was made on the project became the basis for an act that later passed by Parliament.

Again in 1951 the Canadian Government called on the services of Dr. Widtsoe, this time in conjunction with the development of the South Saskatchewan River. Serving on a committee of three, he was able to aid in the study of the irrigation potential and the economic future of a low rainfall province.[23]

V. SUMMARY

John A. Widtsoe was one of the pioneers in the agricultural development of the State of Utah. After training in chemistry at Harvard and still in his twenties, he became chemist to the Experiment Station at the Utah State Agricultural College. In this position experimental work with water and soil was carried on throughout the state. Many suitable cropping systems were formulated and significant studies were made and bulletins published on lucern, sugar beets, soil composition, etc. as a result of these studies.

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[23] Ibid., pp. 183-185.

Assuming the directorship of the Experiment Station in 1900 after receiving the doctor's degree from Germany, Dr. Widtsoe began a thorough study of the variables connected with dry farming, irrigation, and crop production on desert areas. Information concerning crop yields, moisture control, water evaporation demonstrated conclusively that crop quantity and quality can be controlled and cultivated area increased. During his stay at the Experiment Station an agricultural weekly, "The Deseret Farmer," was published in order to provide up-to-date information on current findings.

Leaving the station, Dr. Widtsoe labored two years at the Brigham Young University where he organized a department of agriculture and furthered farmers' institutes and extension work.

In 1907 as head of the Utah State Agricultural College, he continued to support farming developments and sponsored such activities as the Farmers' Round Up, expansion of the extension classes, faculty conducted study groups, the conferment of the degree of Master Farmer.

Miscellaneous pursuits of note were the publication of a book entitled Dry Farming which became a classic in its field, the serving of a term as vice-president of the Irrigation Congress and president of the Dry-Farming Congress, membership on a number of boards and commissions including the State Water Storage Board from 1921 to 1941, the Utah Water

and Power Board; a special committee of seven under Hubert Work, Secretary of the Interior, and the Reclamation Bureau. The Canadian Government also called on his services upon two different occasions, at one time to help with the Lethbridge Irrigation Project in Alberta, and at another time to work on the development of the South Saskatchewan River.

CHAPTER VI

A CHURCH LEADER

After five years of service to the University of Utah as President of the institution, John A. Widtsoe received a call which entirely transformed his life. At the death of Anthon H. Lund of the Council of Twelve Apostles of the Church of Jesus Christ of Latter-day Saints, there existed a vacancy in the Council. President Widtsoe, an active and enthusiastic member of the Church since the conversion of the family in distant Norway, was called to fill the vacancy.

With the call he was confronted with one of the major decisions of his lifetime.

> There flashed before my mind the probable result: The laying aside of many a cherished desire; the constant service to the end of life; the complete change in life from that for which I had been trained. But, the biggest thing in my life was the restored gospel of Jesus Christ. It had full claim on me. Was I worthy of the office? Could I perform its duties properly? I have always been conscious of my limitations. Question after question rushed through my mind. Then, without hesitation I answered, yes. I had never refused a call by the priesthood. It was too late to begin now.[1]

Prior to his calling to the Council of Twelve, Dr. Widtsoe had served in many positions of leadership in the Church. In the Young Men's Mutual Improvement Association he had labored as an assistant superintendent, superintendent,

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[1] John A. Widtsoe, In A Sunlit Land (Salt Lake City: Deseret News Press, 1952), p. 156.

and later in 1905 he became a member of the General Board of the association. He had taught and served in the presidency of an elders' quorum. Many books relating to church doctrine and teaching had been published as a result of his efforts. Included among these were A Concordance to the Doctrine and Covenants, Joseph Smith as Scientist, A Rational Theology, and Gospel Doctrine which were written before his call to the apostleship in 1921. After that time until his death in 1953 a number of other important church books were written and compiled by Dr. Widtsoe. In addition many miscellaneous writings were penned as the need presented itself. Some 14 Priesthood, 3 Sunday School, 13 Young Men's Mutual Improvement Association, and 3 Young Women's Mutual Improvement Association study courses were prepared.[2] In many ways John A. Widtsoe had demonstrated his love and loyalty to his adopted faith.

In April of 1921 at a General Church Conference he was sustained and welcomed to his new calling as a member of the Council of Twelve Apostles. The new duties and responsibilities were very different from those of the preceding years. A much smaller financial allowance required careful spending and budgeting of funds. The labor was extremely demanding leaving little time for personal and family obligations. In

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[2] Ibid., p. 249.

the course of carrying out assignments much traveling throughout stakes and missions of the Church was necessary. Committee work, correspondence, and other miscellaneous activities filled the remaining hours with countless endeavors.

I. THE CHURCH EDUCATION PROGRAM

At the time of the appointment of Dr. Widtsoe as a general authority, the Church school system in Utah was rapidly changing. The era of the Church High School was coming to an end as the support of both the public high school and the Church School was inadvisable. This led to a general reorganization of the Church school system.

The new plan provided for a General Church Board of Education for the Church at large. For the Stake, a Stake Board of Education was appointed and for the Ward, the Bishopric was assigned to direct the educational activities. The immediate supervisor of the religion classes on the ward level was a principal, selected by the Bishopric. On the Stake level a man from the Board of Education supervised educational activities and for the Church as a whole a Commissioner of Education administered the program.[3] Such was the early outline of the Church education system as devised by

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[3] Commission of Education, "Purpose and Organization of the Religious Classes of the Church of Jesus Christ of Latter-day Saints," 1922-23, p. 3.

the staff and John A. Widtsoe who was appointed Commissioner of Education on January 26, 1922.

In his autobiography Dr. Widtsoe spoke of the agreeable nature of this assignment. Having been closely connected with education for many years, he was the logical choice for the assignment, and it was only natural that working with the Church education system would be enjoyable for him. Because of the transitional nature of the program at that time, his period of service, however, did not last long and Dr. Bennion soon succeeded him. In March of 1934 Dr. Widtsoe was to again assume the position of Commissioner of Education for the Church.

Along with the educational system on the ward and stake levels, the seminary program was coming into being through the efforts of John A. Widtsoe and a number of other Church leaders. Through the seminary system classes in religion and ethics could be taken during school hours as well as before classwork had begun.

> This does not in spirit or practice violate the law; but does give our youth the greatly needed regular instruction in religion. The results of this movement are very satisfactory. It would be well if every church would offer such help to the young people of its faith. The thinking men and women of the nation are agreed that such, or similar, means must be found for the full education of our youth, if we shall continue a righteous people.[4]

Dr. Widtsoe was firmly convinced of the need for

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[4] Article in The Salt Lake Telegram, December 28, 1924.

religious education along with other studies on the secondary level. The above statement and others bore out this conviction.

> However, Sunday Schools and regular Sunday services do not suffice. Secular studies, English and mathematics, the arts and sciences, are given permanence and a great dignity in the child's mind, because of the daily recitation and careful supervision. Instruction in morals and correct living, in religion and the things of God, must be given with an emphasis equal to that placed upon subjects of secular and therefore lesser importance.[5]

On the elementary level religious instruction was no less important.

> During eight of the most impressionable years of life the child spends most of its time in the elementary school, which must not teach religion. The L. D. S. religion classes aim to correct this defect. Once a week before or after school hours, when the children have not begun the day's work, or after the school has adjourned for the day, volunteer teachers, often mothers who love and know teaching, meet with the children and give them instruction fitting the age of the children in religion, morals and simple ethics, covering one-half to one hour. The children are taught to pray, to sing hymns, to discuss matters of daily conduct, and to understand the story and spirit of the Bible and other sacred books. The L. D. S. religion classes were organized about 1890. Today, weekday classes in religion, corresponding to the L. D. S. religion classes are fostered by almost every Christian Church. The boards of education of scores of cities allow one hour or more to be used weekly by the children for this purpose. During this period, the children go to their respective church buildings, where the instruction is given. Laws are being proposed in several states making it obligatory upon school boards to conform to the requests of parents that their children be given freedom for an hour or more each week to be taught the larger issues of life. It is becoming a

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[5] Ibid.

nationwide movement.[6]

John A. Widtsoe felt that the Church schools served very definite purposes and that if these purposes were fulfilled, the existence of the school system was amply justified. In an article for the "Improvement Era," official Church magazine, he defended the basis for its establishment.

> The first purpose of our System of Church Schools is to supplement secular with religious instruction, definitely designed to make Latter-day Saints of the pupils, from the first grade to the university; and to employ in such instruction the approved methods of the school room, in discipline, text books, tests of progress, and promotions. A second purpose of the Church Schools is to train professional teachers for the Church, who will have a rooted testimony of the truth of the gospel in their hearts, and who by their example and influence will teach the value and beauty of the gospel to their pupils. . . . A third purpose of the Church Schools is to give technical training in co-operation with the auxiliary organizations to those who may be asked to do special work for these organizations.[7]

II. AT THE UNIVERSITY OF SOUTHERN CALIFORNIA

In the summer of 1935 the University of Southern California offered a series of classes for regular credit on the doctrine and program of the major religions of the United States. Among those represented were the Roman Catholic, Jewish, several Protestant groups, and the Mormon Church.

> It was a courageous gesture. In the universities of the land any old philosophy, ancient or modern for that

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7 John A. Widtsoe, "The Church School System," Improvement Era, 26:866, August, 1923.

> matter, might be taught but if the present philosophies bore the religious or church label they were prohibited. Sound, prominent thinkers felt that if collegiate youth, the coming national leadership, were made acquainted with living religions in a systematic, dignified manner, placed at least on an equal footing with all academic subjects, it might help advance the national welfare.[8]

Dr. Widtsoe and his wife were appointed to inaugurate this work. Spending the school year of 1935-36 in Los Angeles, he formally presented "Mormonism" to all the interested student body. According to Dr. Widtsoe's report "The classes were well attended and successful."[9]

The growth of the Latter-day Saint Church in the California area had been almost phenomenal. Many students from all over the country had, also, swelled the number especially in the southern California areas. In order to provide religious instruction for students at the University of California at Los Angeles, the Los Angeles City College, and several junior colleges in the area, the Mormon Church became a member of the University Religious Conference serving that area. The express purpose of the conference was "preserving and developing religious convictions among college students."[10] In an article written concerning the University Religious Conference Dr. Widtsoe stated:

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[8] Widtsoe, In A Sunlit Land, op. cit., p. 173.

[9] Ibid.

[10] Article in the California Inter-Mountain Weekly News, May 28, 1936.

> A California institution of much interest to the Latter-day Saints is the University Religious Conference. . . . It is wholly non-sectarian. Its slogan is 'Co-operation without compromise.' Each church affiliated with the conference cares for its own students, and devises methods for maintaining interest in the religion of the church to which the students belong.
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> The Church of Jesus Christ of Latter-day Saints has been a member of the organization for several years. Latter-day Saint students are organized in the three Los Angeles schools of college grade under the name of Deseret Clubs. These clubs meet weekly to study Gospel problems; they also have periodic club dinners, socials, and outings. They serve to hold together students belonging to the church and to provide, in addition, some religious instruction along college methods, and to meet religious problems that arise in the pursuit of college training.[11]

Through the channels of the conference many outstanding theologians and religious leaders were procured for discussion and counseling purposes. One particular gathering was cited:

> Recently, the University Religious Conference secured the presence for a week's conference of three representatives of the National Conference of Jews and Christians, organized some ten years ago to promote goodwill among people of different religious faiths. For several days, at Loyola University and the Ambassador Hotel, conference dealing with live religious problems were discussed. The meetings were labeled Rabbi-Priest-Minister Conferences. The three visitors were Dr. Everett R. Clinchy, executive secretary of the National Conference of Jews and Christians, who represented the Protestant religions; Father Michael J. Ahern, famous student of science, who represented the Roman Catholic church; and Rabbi Morris S. Lazaron, writer and civic worker, who represented the Jewish section.[12]

During the short stay of Dr. and Mrs. Widtsoe in

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[11] Ibid.

[12] Ibid.

southern California, teaching responsibilities and the work with the religious conference required almost constant attention and dedication. However, time was still found at odd intervals to finish a book entitled The Program of the Church.

After the departure of the Widtsoes from California, Dr. G. Homer Durham and Dr. Byron Done successfully continued the work.

III. MISCELLANEOUS ACTIVITIES

In 1935 John A. Widtsoe was called to serve on the editorial staff of the Improvement Era. In this capacity his varied skills and experience in the fields of writing, education, and theology were called upon.

A number of teaching appointments came as a result of his educational background and experience. Beginning the summer of 1924 he gave a number of lectures on Western Rural Problems at the Utah State Agricultural College. Courses especially designed for seminary teachers were conducted in 1928 at the Alpine Summer School at Aspen Grove. Also, as Commissioner of Education during his second administration in 1934, Dr. Widtsoe gave lectures on various aspects of Mormonism to seminary teachers.

Again at the Utah State Agricultural College after his return from California, he gave summer school courses on social and moral problems. The instruction was carried on over a

period of six years.[13]

IV. SUMMARY

The call to the Council of Twelve Apostles of the Latter-day Saint Church did not close the chapter on the educational contributions of Dr. John Andreas Widtsoe. On the contrary the Mormon Church was quick to utilize the exceptional executive and teaching abilities of their latest general authority. Church education going through a period of flux offered a challenge to the most able. Assuming the position of Commissioner of Education of the entire Church, Dr. Widtsoe with the assistance of many other competent educators was able to organize and direct a new system with foresight and discretion. The establishment of the seminary system was commenced. Wards and stakes were used in setting up a program of religious education with the basic structure of the Church.

From a philosophical standpoint Dr. Widtsoe wholeheartedly supported both a seminary system to parallel the public schools, the institutes on the college level, and another system within the framework of the Church to challenge the spiritual side of the individual. Ethics, morals, and religious instruction were just as important to the growth and development of the student as the traditional subject

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[13] Widtsoe, In A Sunlit Land, op. cit., p. 175.

matter.

In 1935 Dr. Widtsoe helped initiate a series of classes given at the University of Southern California on the religious program of the Mormon Church. Along with the leaders of other major religions of the nation, he established classes which had no precedent in the candid presentation of present religious doctrine and philosophy. The concomitant benefit of the classes in reducing prejudice and bad feelings, and in bringing the groups together was significant. Dr. Widtsoe, also, fully supported the University Religious Conference and enthusiastically extolled its goal of developing the religious convictions of college students.

Valuable leadership and instruction was provided by John A. Widtsoe in the seminary teacher-training program of the Church. Outside the realm of theology he rendered useful service to the Utah State Agricultural College through his summer classes on agricultural problems.

CHAPTER VII

A SUMMARY

Problem. The purpose of this study was to describe the life, philosophy, and educational contributions of Dr. John Andreas Widtsoe. In pursuit of this general objective, the following specific objectives have been considered: (1) to present a biographical sketch of Dr. Widtsoe's life and educational background giving special consideration to family, religious, and environmental influences which helped determine his goals, personality, and character; (2) to portray and describe his educational philosophy as revealed by his writings and published discourses; (3) to determine his important administrative contributions as President of the Utah State Agricultural College and the University of Utah; (4) to discuss his agricultural research studies and advancements placing special emphasis on contributions in the Utah area concerning reclamation, dry farming, irrigation, and chemistry; (5) to review his educational achievements, policies, and activities as a religious leader of the Church of Jesus Christ of Latter-day Saints; and (6) to summarize and evaluate the educational contributions of Dr. Widtsoe.

Method. The historical method was used in the preparation of this study. A variety of documentary materials served as the primary sources. Of much use were the autobiography

and other books of Dr. Widtsoe. Of help too were interviews with people associated professionally and personally with John A. Widtsoe; miscellaneous articles and publications in newspapers, periodicals, agricultural bulletins, University of Utah and Utah State Agricultural College bulletins, reports, newspapers, yearbooks, etc., Church of Jesus Christ of Latter-day Saint publications.

I. SIGNIFICANT FINDINGS

Early background. John A. Widtsoe was born in Daloe, Norway, on January 31, 1872. A fine Norwegian heritage of sturdy, intelligent, industrious, and capable forebearers left an indelible mark on the character and personality of the young man. John's mother came from a long line of king's pilots who guided the passage of ships off the mainland of Norway. On his father's side of the family many gifted and prominent educators had served their generation well. It was not surprising that from his immediate family many valuable lessons were learned. Even at the death of his father when John was a small boy a desire and love for education was developing. In addition such pioneer virtues as frugality, industry, and determination were nourished by a loving, but persistent mother.

Having come to America from a foreign land, John A. Widtsoe was confronted with the challenge of the language

barrier. It was ever to his credit that through eagerness and an aptitude to learn he surmounted the initial handicap, and then excelled to the point of ably competing with the leading scholars in the land.

The loss of his father and the migration of the family to America were incidents not conducive to the accumulation of material wealth. Hard work and sacrifice had been necessary for all that was achieved. During the early years in Logan circumstances prevented young John from attending school regularly, and thus only through private instruction and studies done on his own initiative was the craving for education partly satisfied. Attendance at Harvard University too was the result of serious deliberation and self-denial on the part of both family and student.

With adequate skills and educational training John A. Widtsoe went on to serve his generation as professor, chemist, director of an experiment station, head of an agricultural department at the Brigham Young University, President of the University of Utah and the Utah State Agricultural College, and Apostle to the Church of Jesus Christ of Latter-day Saints.

Philosophical contributions. In the philosophy of Dr. Widtsoe the search for truth was the motivating factor behind most of his activities. While he extolled the eternal verities as a goal in education, knowledge and truth he believed should be functional. In line with this he proposed that

education should be preparation for a specific skill and that usefulness above all should be honored in the classroom. Both vocational and agricultural education received considerable emphasis since they would be in the course of events the likely vocation of the majority of students on the elementary and secondary levels. Dr. Widtsoe foresaw the need for appreciation of the soil and manual work in the early years of the child. The shackles of tradition had obscured the importance and beauty of technical and manual work. Dr. Widtsoe with keen insight and understanding wanted to bring recognition for their worth and intrinsic value.

John A. Widtsoe was a firm believer that women as well as men should be educated. While women were achieving distinction in many fields, their primary place was the home where training and competence were equally important and necessary. At the Utah State Agricultural College home economics rose in dignity and esteem. Well equipped buildings and facilities were established as a result of Dr. Widtsoe's efforts and the support of the State Legislature.

He did not hesitate to attack educational inconsistencies and inadequacies. He criticized the wide demarkation between educational levels and the dangerous fetters of subject matter tradition. Subject matter and school itself were useless unless they directly or indirectly contributed to the broad educational goals of preparing the man to meet and conquer

his environment and self, and the development of those ideas and attitudes toward life which would be conducive to maximum happiness.

The duty of the school system according to Dr. Widtsoe's philosophy was manifold. The schools served as a powerful defense during social or economic stress and moral decline. They were preservers of the democratic way of life. Ethical and spiritual development of youth was among their important obligations as well.

University president. Dr. Widtsoe served as president of the Utah State Agricultural College from 1907 to 1916. During this time student registration notably increased. Sabbatical leaves and salary adjustments cemented relations with the faculty members resulting in better and more permanent service. Scholastic standards improved and entrance requirements reached a level worthy of collegiate standing.

Agricultural progress was noteworthy with several innovations emerging. The Farmers' Roundup was begun; area home economic advisers were assigned; and the county agricultural agent movement was introduced. The fine work of the Experiment Station continued to contribute much to improve soil and water utilization in the region.

At the University of Utah where President Widtsoe served from 1916 to 1921, an early feeling of tension and unrest among the teaching staff subsided as open sincerity

marked administrative policy. In addition a series of board rules and regulations helped clarify many areas of concern.

During the five year period the university continued to grow and expand. The Extension Division came to be a very important part of the university's service. A four-quarter system was established on campus which offered the flexibility of study to enable many to enroll who otherwise would have found it impossible. An organized military corp trained many of the young men during the crisis of World War I. The School of Commerce, established under the administration of President Widtsoe, was meeting a great need of the state in providing trained leadership in industry.

A successful public health campaign was waged; state resources were studied and evaluated in a series of surveys to broaden the economic base of the region. The observatory, the medical building, the Stewart training school, the museum, and the dining hall were erected, expanding available facilities for educational activities.

Agricultural contributions. John A. Widtsoe was one of the pioneers in the agricultural development of the State of Utah. After training in chemistry at Harvard and while still in his twenties, he became chemist to the Experiment Station at the Utah State Agricultural College. In this capacity experimental work with water and soil was carried on throughout the state. Many suitable cropping systems were formulated as

a result of these efforts. Significant studies were made and bulletins published concerning lucern, sugar beets, soil composition, etc. In conjunction with this work farmers' institutes were held in 1897 throughout the southern part of the state enabling all the interested to benefit from the studies made by the Station.

Assuming the directorship of the Experiment Station in 1900 after receiving the doctor's degree from the University of Goettingen, Dr. Widtsoe began a thorough study of many of the variables connected with dry farming and irrigation, and crop production on desert areas. Information concerning crop yields, moisture control, water evaporation demonstrated conclusively that crop quantity and quality can be controlled and total area under cultivation increased.

During the stay at the Experiment Station an agricultural weekly, "The Deseret Farmer," was published to circulate current findings directly to those concerned.

Leaving the Experiment Station, Dr. Widtsoe labored for two years at the Brigham Young University where he organized a department of agriculture and furthered farmers' institutes and extension work.

In 1907 as head of the Utah State Agricultural College, he continued to sponsor and support farming developments. On many occasions through speeches and publications he extolled the opportunities and advantages accrued from work with the

soil. To Dr. Widtsoe the conquest of nature should be the great passion of intelligent men. The Farmers' Round Up, expansion of the extension classes, faculty conducted study groups, the conferment of the degree of Master Farmer were among his most significant contributions while president of the agricultural college.

Many miscellaneous activities filled the leisure hours of John A. Widtsoe. A book entitled Dry Farming, A System of Agriculture for Countries Under A Low Rainfall was published and soon became a classic in its field, eventually being translated into several languages. He served as vice-president of the Irrigation Congress and president of the Dry-Farming Congress in 1912, the first year the conference was held outside the continental United States. He served on a number of boards and commissions including the State Water Storage Board from 1921 to 1941, the Utah Water and Power Board; a special committee of seven under Hubert Work, Secretary of the Interior, and the Reclamation Bureau. The Canadian Government called upon his services on two different occasions, at one time to help with the Lethbridge Irrigation Project in Alberta, and at another time to work on the development of the South Saskatchewan River.

Church leader. As a member of the Council of Twelve Apostles of the Church of Jesus Christ of Latter-day Saints from 1921 until his death, Dr. Widtsoe served as Commissioner

of Education of the entire Church school system in 1922-23 and again during 1934-35 performing a significant role in establishing the seminary system and an education program within the ward and stake organizations.

During the school year of 1935-36, Dr. Widtsoe taught a series of classes at the University of Southern California on the educational and religious program of the Mormon Church. He fully supported these classes and those taught by the other major religions realizing the great need for the candid presentation of religious doctrines and philosophies in higher education. Closely allied to this program was the University Religious Conference whose goal of developing the religious convictions of college students received his full approval. Mormon groups became members of the conference promoting their plans and projects.

Additional valuable leadership was furnished by John A. Widtsoe in the seminary teacher-training activities of the Church and in the summer class instruction on agricultural problems at the Utah State Agricultural College.

II. CONCLUSIONS

Truly John Andreas Widtsoe contributed much to society and to his fellow men. His life was characterized by service to education and dedication to principle. In the positions of professor, chemist, director of an experiment station,

head of an agriculture department, president of the University of Utah and the Utah State Agricultural College, and Apostle to the Latter-day Saint Church he faithfully carried out his responsibilities and obligations. In the field of education he was an ardent and loyal worker; in agriculture he was tireless in his efforts to develop the soil and the agriculture potential of Utah and the western states; as an administrator his foresight and able leadership provided the stimulus for the growth and expansion of two of Utah's institutions of higher learning; as a religious and civic leader he contributed to the educational growth and spiritual welfare of the community.

Certainly in any evaluation of John A. Widtsoe a study of his early life and background would reveal that he was composed of those qualities and elements which go into greatness of character and magnitude of achievement. A fine heritage, high family ideals, persistence in achievement and accomplishment, dedication to purpose, acute mental faculties all combined to produce a man of unusual ability and leadership. However, he was a simple and unaffected man in many ways. His language and style, simple, direct, and to the point, seemed best to illustrate this fact. Often it contained colorful phrases and expressions to increase effectiveness, but neither his writing nor his language was ever garnished with overly ornate or elaborate phrases too difficult to

comprehend. It was natural to expect a candid, unaffected personality to express itself in a simple, meaningful way. In addition John A. Widtsoe wanted people to understand him and he spoke and wrote accordingly.

Dr. John A. Widtsoe left to the world a philosophy of practical, down-to-earth implications. The philosophy, like the man, stripped life of its artificiality. It brought reality into focus. In many respects it was idealistic, but closely entwined was the weave of practical functionalism. There was much vitality in the educational philosophy of Dr. Widtsoe. It included a preparation for the future; it presupposed the development of certain skills and the accumulation of certain facts; it suggested a training in the understanding of the ideals of democracy; it included not only academic proficiency, but ethical and moral courage as well.

Considering the unrest and opposition encountered as a university president, the contributions of Dr. Widtsoe were indeed significant. His ability to harmonize faculty and administration required the utmost tact and diplomacy. Careful budgeting, good public relations, and cooperative dedication to a program of growth and expansion achieved commendable results leading to increased educational activities, facilities, and registration.

During his administrations, education was increasing in importance and its need was being recognized. It was only

natural that increased attendance and growth would parallel this recognition. The influence of Dr. Widtsoe on the expansion of the schools should not be minimized, however. His contributions greatly added to the development of the Utah State Agricultural College and the University of Utah.

In the area of chemistry and agriculture the contributions of John A. Widtsoe were also impressive. He well deserved to be classed as one of the pioneers in irrigation and dry-farming development in the west. There was much merit in the fact that he continued to serve farming and agricultural interests until his death in 1953 even though he had then passed eighty years of age. Such dedication to a cause when it was so beneficial and noteworthy deserved special recognition. Thousands of farmers today owe much of their prosperity and success to such men as Dr. Widtsoe.

In the religious area as well he left a mark of distinction. Freely giving of his time, talent, and depth of experience, John A. Widtsoe became one of the leaders in the seminary school movement. It would be extremely difficult to appraise the great influence he exerted through his books, editorials, and public discourses in developing an interest and concern for religious training. His being chosen to initiate the class on the program of the Mormon Church at Southern California was a tribute to his educational prowess. His leadership and untiring devotion certainly were valuable

assets to the Latter-day Saint educational system.

Concluding thought. In reviewing the life of Dr. John A. Widtsoe, the contributions of this one man in any one of a number of fields were truly amazing and noteworthy. In any one field, as a professor, administrator, chemist, agricultural authority, or religious leader he would have achieved prominence and recognition. His life was one of dedication to principle and of devotion to his fellow men. Thousands will remember him through his many writings and for his attainments and acts of service. His name is revered in the halls of institutions of higher learning; his experiments and studies in chemistry have benefited innumerable farmers and agriculturists; his spiritual and civic leadership has influenced for good many individual and community. His life will serve as an inspiration to young and old for many generations to come.

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